DOCUMENT RESUME

ED 380 045 HE 028 199

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TITLE Review of Architecture and Related Disciplines in the State University System of Florida.
INSTITUTION State Univ. System of Florida, Tallahassee.
REPORT NO BOR-94-3
PUB DATE Feb 95
NOTE 109p.; Cover title varies slightly.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Architectural Education; College Faculty; College Programs; College Students; Construction Management; Consultants; Educational Facilities; Employer Attitudes; Higher Education; Interior Design; Program Evaluation; *Program Improvement; *State Universities; Urban Planning
IDENTIFIERS Florida; *State University System of Florida

ABSTRACT

This review of architecture and architecture-related programs in the State University System of Florida consists of summaries of individual university consultant reports for three institutions visited, overviews based on status reports for programs not visited, and consultant recommendations regarding system-wide issues. Site visits took place at the architecture program and construction engineering technology program at Florida A & M University, the University of Florida's architecture program, and Florida International University's architecture and construction management programs. Status updates are provided for urban planning programs at Florida Atlantic University and Florida State University and for interior design programs at Florida State University and Florida International University. System-wide issues that are discussed include: inter-university cooperative programs; a 5-year bachelor's of architecture degree; and the need for demand studies and control totals. More detailed consultant reports concerning each program are then presented, focusing on program characteristics, students, faculty, and facilities and resources. Appendixes offer a curriculum vitae of the lead consultant, a list of architecture program review coordinators, and results of a Florida employer education in the United States but the majority of physicians in general

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ED 380 045

ARCHITECTURE PROGRAM REVIEW

STATE UNIVERSITY SYSTEM OF FLORIDA

FEBRUARY 1995

BOR 94-3

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REVIEW OF ARCHITECTURE AND RELATED DISCIPLINES IN THE STATE UNIVERSITY SYSTEM OF FLORIDA

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INTRODUCTION

This review of architecture and architecture-related programs in the State University System of Florida consists of summaries of the individual University Consultant reports for the three institutions visited during the week of October 18, 1993; overviews based on the status reports for the programs not visited; and Lead Consultant recommendations regarding system-wide issues. The reports of University Consultants conclude this report.

Site visits took place at Florida A & M University, the University of Florida, and Florida International University during the week of October 18, 1993. In addition, an all-day meeting was convened in Tallahassee in order to discuss the future of the FAMU/USF cooperative architecture program as well as institutional desires for new programs in architecture.

SUMMARY: FAMU Architecture

The number of hours to the bachelor's and master's degrees are within the Board of Regents approved range, and the student/faculty ratio is within a range considered acceptable by the discipline. A low graduation rate is related to a low student retention rate. The curriculum is professionally oriented and easier to comprehend than at the last review, but students have not taken advantage of the broader education that is now available to them. The School follows the articulation

agreement of the state regarding community colleges. The current shortage of space justifies the limited access designation; however, that designation may not be compatible with the University's stated desire to expand enrollment.

The major problem facing this program is one of leadership and implementation. The 1990 accreditation team identified a number of problems, and although solutions have been identified, they have been very slow in coming. Existing problems include the need to broaden the curriculum; the need to establish better contact with the rest of the campus; student retention; the creation of a School advisory board and bylaws to guide decision making; the creation of an adequate recordkeeping system that would allow administrators to have basic facts and figures readily available; and an increase in the rate of faculty scholarship, grant seeking, and publication.

Some students in the School feel that they have not been involved in curriculum discussions. Furthermore, the School does not have a good image among all of its graduates and employers, as evidenced by the site visit. The School clearly needs to undertake a solid study of its image, market, placement, and student recruitment efforts. Emphasis needs to be placed on recruitment, retention and placement. In faculty recruitment, women and African-Americans should be a priority.

A post-occupancy study of the school facility should be undertaken, as the facility is not serving the needs of the school. If the school is successful in increasing student

recruitment, then space needs will become more critical. The FAMU program could have its limited access designation removed in order to allow it to expand its enrollment. The architecture building at FAMU needs to be improved, however, if students are to be attracted and served adequately. Scholarship aid will also be required if FAMU is to attract students from across the state of Florida.

A self-study needs to be undertaken immediately to assure that the school is addressing the issues necessary to position itself properly for the next accreditation visit. Before the program embarks on a plan for expansion, current problems must be addressed successfully. The FAMU School of Architecture is in need of a plan of action, strong, dynamic leadership, and a thorough self-study.

SUMMARY: FAMU Construction Engineering Technology

The construction engineering technology program has a faculty with adequate qualifications, although the number holding the Ph.D. needs to be increased. The faculty members seem to work well together and with other programs on campus. The distribution of faculty by race and gender is not adequate.

The program is in a modern building with efficiently used space. The main library has a limited print collection in construction and the audio/visual collection is weak, as is the technology collection. There is a need for improved equipment and software in the computer lab, and additional equipment in the

technical labs.

There is proper currency, depth, and breadth in course content, and the number of hours is adequate. Admissions standards are appropriate. The graduation rate is low. There is, also, a lack of depth in laboratory content. Moreover, the course sequence should be rearranged to build on concepts, and some courses should be combined in order that more concepts can be covered. Perhaps an adjustment in this area can help reduce what seems to be an excessive teaching load. The planned option in Construction Management should serve a strong student interest and industry need.

In addition, the faculty is small in number and the quality of scholarship and publication is quite limited. Little funding seems available for faculty development.

Assistance needs to be provided to students so they can obtain internships. Articulation with community colleges needs to be improved. Attention needs to be paid to increasing the number of majors and the number of students who graduate from the program. An improvement in the student advisement process may help address the latter issue.

Program leadership is extremely weak. Some members of the faculty do not have a clear identity with the Construction Engineering Technology Program. There is need for a closer bond of mutual respect between the Program Coordinator and the Division Director.

This program needs to conduct a serious, in-depth self-study

and develop a long range plan and an action plan. The identity, mission, goals and name of the program are confusing and not clearly defined within the current organization. Feedback is needed from graduates and employers. Work needs to be done on more clearly explaining the program to all concerned, both current and prospective members. The curriculum guide and University catalog need to be more explicit in terms of courses required for the degree. A better understanding of the admissions process needs to be developed.

A clearer organizational chart needs to be developed for the Division of Engineering Technology. Moreover, the future organizational location for the construction technology program should be determined. There are several options. One is to leave the program in the College of Engineering Sciences Technology and Agriculture. Another is to separate the agriculture programs from the construction engineering technology program by relocating the latter into a new Engineering Technology division. Yet another option is to combine the construction technology program with architecture and possibly contribute to a stronger School of Architecture. The issue here is two-fold: whether the leadership of the program is sufficient and whether the program is located in the proper college.

SUMMARY: University of Florida College of Architecture

There have been impressive improvements since the last review of the College by the Board of Regents. The College is

well organized, well run, and aware of the problems that it must address. The new administration has energized the faculty and students and expanded the College's activities in research. Most of the academic units in the College have achieved a high level of recognition and distinction in their fields.

New, talented department administrators have been brought aboard, and the continuing chairs have maintained continuity of leadership. There is a healthy sense of growth and change. Employers report that students graduating today are better prepared professionally than those graduating five years ago. The rebirth of the graduate program in architecture and the growth of the other graduate programs are increasing the quality of the College. The establishment of the Ph.D. program added distinction, intellectual challenge, and increased research potential. The various research centers in the College add an important dimension, as do the off-campus programs.

While the current review is overwhelmingly positive, several challenges remain from the last review. There needs to be an integration of the academic programs and professional emphasis. Financial aid is needed to attract high quality graduate students. Attention needs to be paid to facilities so they do not limit the academic programs. The program in interior design has yet to be implemented.

The academic programs appear to be current and well developed by the faculty. Credit hour requirements for the various degree programs appear appropriate. Admissions

procedures are clear, but a review of the procedure for native and transfer applicants to the upper level of the architecture program should be undertaken to assure that the criteria are clear and appropriate. At the same time, the articulation procedures with the community colleges should be reassessed to assure an effective and efficient process.

Since the College is very large, care needs to be taken to assure that quality is maintained. It appears that the students are somewhat isolated in their individual departments, so there may need to be attention to joint programs, joint faculty appointments, and other ways to build ties among the individual departments.

Some College members appear to support the separation of the Building Construction program as an independent college. The consultants do not see a strong rationale for this proposal.

Although the College is located in a small metropolitan area, the University of Florida should have a more representative mix of races and culture in the student body and faculty of its College of Architecture.

The College should address its space and facility needs in light of enrollment levels. The expansion of research efforts will demand more space. Although the computer facilities were state of the art when installed, they are growing obsolete. Library holdings and space require attention. The College might wish to examine its enrollment levels to determine whether it would be appropriate to scale back enrollments and concentrate on

selected quality improvements.

Although the College receives high marks from the review team, it should develop a strategic plan for its future, and an action plan for implementation. The College needs to examine the extent to which it can support the various initiatives it has begun. It needs to evaluate its enrollment levels and patterns. It needs to articulate the criteria for admission to the upper level, examine ways to deliver instruction more effectively in the foundation courses, and it needs to work to integrate its various departments.

The architecture program at the University of Florida is a high quality program that has experienced substantial demand over the years. The University Consultant believes that it can become an even higher quality program if its enrollments were controlled and even reduced. The consultants recommend that the College consider reducing its architecture enrollments and reallocate resources in order to improve quality.

SUMMARY: FIU Architecture and Related Disciplines

The four programs in the School of Design at Florida International University constitute a comprehensive collection of design related degree offerings. The programs in architectural technology and in landscape architecture were formally visited, while the programs in interior design and in environment and urban systems were not visited formally.

The curricula in the architectural technology and landscape

architecture programs are current, well organized, properly sequenced and appropriate to the degree. The number of credit hours are appropriate to the degrees offered, but determining the number of credit hours required to graduate was unnecessarily difficult and complicated.

The undergraduate programs are well articulated with the Miami-Dade and Broward Community Colleges. The degree programs are linked to institutes and centers on campus and there is an active Design Advisory Board.

The recommendations from the past review have been addressed. The architecture, landscape architecture and interior design programs have been placed in a new School of Design with its own director, and the master's of landscape architecture program has been fully integrated into the School. The only outstanding recommendation is the lack of dedicated and consolidated space for the programs.

The student body is diverse, reflecting the community in which the University is situated. Admissions standards are appropriate. Student work in both architecture and landscape architecture was reviewed and found to be quite good and certainly competitive with similar programs across the country. The programs are experiencing a shortage of space and computer support.

Graduates are quickly and meaningfully employed. Both programs have the potential to grow substantially, but there is little room for growth with the current resource allocations.

Faculty are well qualified, and the quality of student work suggests that the level of teaching is high. Faculty members also have kept active professionally. Faculty numbers are adequate for the size of the student body and the number of degrees offered at present. Faculty seem to relate well to other programs and faculty on campus, but there are few funds available for faculty development.

The quality of space is judged to be good, but it just barely meets current needs and is not well consolidated. Library holdings appear to be adequate.

Demand for the architecture program may be dampened by the title, which suggests a trade school curriculum. Therefore, the undergraduate architecture program should be renamed. The bachelor's program in architectural technology was reviewed by the University Consultant who believes that it is a high quality pre-architecture program which should be designated as a bachelor's of design in architectural studies. The University Consultant recommended the B.S. in Architectural Studies. This name change should be approved only if the president of FIU identifies architecture as a continuing priority.

In order for the programs to continue to improve, the College and School should move to develop and accredit professional programs. The architecture program should be structured around a four-year non-professional undergraduate degree program with students being prepared to enter a two-year accredited master's of architecture program. The interior design

program should also move toward accreditation, but the first step should be to increase the number of full-time faculty members in this program.

The development of a fully accredited undergraduate degree program in landscape architecture should be studied, and the master's in environment and urban systems should be examined to see whether accreditation should be sought from the Planning Accreditation Board. In any event, the program should be marketed better.

When a critical mass of students and faculty is reached, consideration should be given to college status for the School of Design. The Construction Management Department should be studied for inclusion in the new College of Design.

The School and College need to develop an action plan to address the space problems facing these programs. Comparative data for peer and aspiration programs should be collected so that progress may be measured against standards.

SUMMARY: FIU Construction Management

Since the last review, there has been much progress made in improving the curriculum and the quality of graduates as well as the productivity of the faculty in the construction management program. The program has strong leadership.

The lack of space and the lack of computer accessibility identified in the earlier review have not been properly addressed.

The mission and goals of the department are consistent with the needs of the construction profession. The program meets the depth and breadth needs of the construction industry. The needs of place-bound students are being met with instruction at the Broward Community College campus.

The diverse student body reflects the community within which the University is located. Student admissions, number of majors, and degrees granted are in line with other peer institutions. Students indicate that advising and counseling are good.

The faculty appear to be good teachers, and were praised by students. The faculty is diverse in academic background, race and culture. Most notable is the growth in the dollar volume, quality, and the sources of funded research. The research appears to be having an impact on public policy decisions in the region. The publication records of faculty have been growing. Faculty also serve the community through numerous community service projects.

It was difficult to determine the minimum number of credit hours required for the undergraduate degree. These requirements need to be explained more clearly. Moreover, the minimum number of credit hours should be reduced to 132. This can be done while the department continues to meet the minimum accreditation requirements of ACCE.

The graduate program has shown considerable growth over the past several years, and the program entrants are well qualified and enthusiastic.

The program is hampered tremendously by a lack of space. The only space allocated to the department is for faculty offices. There are no dedicated laboratories, classrooms, computer facilities, teaching assistant office space, or storage rooms. The department is the most cramped visited during the full week of campus site visits.

With adequate space and computer facilities, the consultants would expect the program to move to an even higher level. If space were available, the program could take advantage from an increase in the number of graduate students.

STATUS UPDATES OF PROGRAMS NOT VISITED

Florida Atlantic University: Urban Planning

The master's in urban planning is a relatively new degree, being first offered in the Fall of 1989. Located within the College of Urban and Public Affairs, the department serves both full-time and part-time students. The program is scheduled for an accreditation site visit in the Spring of 1994; it had a pre-accreditation visit in the summer of 1992. The FAU urban and regional planning program was also reviewed in the late 1980's by the State University System during a program review of geography and related disciplines, as well as a program review of architecture and related disciplines. The program was under development during these reviews, and a number of shortcomings were identified.

During these earlier reviews, enrollment levels were identified as a problem, and the program was advised to develop a recruitment plan to address the provision of a continuing pool of qualified students. Graduate stipends were identified as important to attract students of varied backgrounds. While attention to linkages to other programs was stressed by the review teams, the importance of developing a strong, independent faculty was also stressed. The need to nurture junior faculty was also cited.

Since its establishment, efforts have been made to create a strong, stand-alone program. Faculty members with needed

backgrounds were hired, a consultant helped design improvements to the computer instruction efforts of the department, and revision of the curriculum took place.

By 1992-93, the department grew to there permanent faculty members, a distinguished visiting professor, faculty from the Joint Center for Environmental and Urban Problems, and several adjuncts. Approximately 40 students were enrolled, and 13 students received their degrees that year. Applicants are being sought from a wider geographic area.

The department has sharpened the focus of its program, concentrating on growth management and environmental planning and technological support. The department has a positive working relationship with the Joint Center for Environmental and Urban Problems. The Joint Center is supporting between six and ten planning students through graduate stipends

The department has developed short and long range goals that are consistent with the Planning Accreditation Board criteria for accreditation. The department has identified five areas that it will address in its post-accreditation status, including expanding its degree offering by the creation of a bachelor's degree in urban and regional planning, strengthening its design and computer-assisted component of the curriculum, increased publications, more presence in the local planning profession, and increased non-state funding for faculty and student efforts.

While these seem to be reasonable goals for the department, no data were presented on demand for the graduates of the program

or demand for undergraduate students. Moreover, although enrollments have increased since the early years of the program, close attention will have to be paid to the recruitment of students and the creation of sources of their support. If the department continues to seek students from a larger geographical area, financial support for the students will be necessary. Financial support will also be needed to keep the GIS Lab current.

The senior faculty members of the department are qualified and active, and the new appointees promise to move the department forward.

Based on the data provided in the written document, the department appears to have addressed the major concerns raised in earlier reviews. As the department is relatively new, it still is in the process of developing. The department is properly preparing for an accreditation visit.

The department has indicated its interest in offering an undergraduate degree. The undergraduate degree in planning is offered at some of the nation's most prestigious planning programs, and enrollments are substantial at these programs. This may be a useful degree to offer in the expanding south Florida area; however, the department has provided no demand data or other information about the degree program. The development of the undergraduate degree should be considered only after the department successful completes its accreditation review and has provided sufficient demand data.

Based on the data provided, no major concerns about this program could be identified. The diversity of the student body was not indicated in the document. A full review will, of course, take place during the accreditation visit next year.

Florida State University: Urban Planning

This is the oldest and largest planning program in Florida. Although primarily engaged in graduate education, the program offers undergraduate coursework to students in other departments. The prior Board of Reagents review in 1987-88 gave a positive assessment of the program, although it did find fault with the level of financial aid and faculty numbers. The lag in enrollments was attributed to the lack of financial aid.

Since the time of the earlier review, student enrollment has increased from the high sixties to the low one hundreds. At the same time the quality of entering students increased as the department no longer admits students provisionally. Applications have nearly doubled from 80 to 155 since 1987. The diversity of the student body increased in percentage terms, yet the absolute numbers are small.

Student enrollment will depend upon the expect to which financial support can be increased, especially in terms of highly talented students and students from outside the state.

The prior review cited the need for a transportation planner, and one has been hired. The department would like to increase the capacity of the specialization by hiring another

transportation planner.

The prior review indicated that the program should develop cooperative programs with FAMU. While the faculty share information and some students enroll at the respective institutions, there is truly no cooperative program, nor is there likely to be one as the architecture program is predominantly an undergraduate program and the planning program is a graduate program.

The quality of the program is indicated by the fact that the department was awarded the editorship of the *Journal of Planning Education and Research*.

The faculty, as described by their curriculum vitae, appear to be engaged and productive. Most have current publications in refereed journals, and a number list substantial externally funded grants and contracts.

Cutbacks in state funding caused the department to curtail its off-campus MSP program that had provided place bound practicing planners in central Florida with professional education. Reduction in funding also caused the department to reduce the number of adjunct faculty members and reduce undergraduate course offerings as well as eliminate the undergraduate Certificate in Planning Studies program. Funding cutbacks also affected the graduate student field trip, student recruitment, and faculty professional travel.

The department also cites the need for improved computer support systems for teaching and research. Space was also cited

as a severe problem, limiting the course offerings and perhaps affecting recruitment.

Florida State University: Interior Design

Interior design is located in the School of Visual Arts and Dance and offers the b.s., b.a., m.s., and the master of fine arts degrees. The two undergraduate degrees are limited access, and the master of science is the first professional degree and the master of fine arts is a post-professional degree.

The department has attempted to respond to the last review, in that it has reorganized the use of its space to accommodate computer-based learning, faculty offices, a gallery, and library space. The undergraduate student/instructor ratio has been maintained at below 18:1 to assure that the department meets accreditation standards. The department is working with the administration to locate space to provide work stations for all seniors in the major and to respond to the Americans with Disabilities Act requirements. A list of space needs has been identified jointly with the dean. Space limitations are restricting program growth.

Student admissions decisions include a portfolio review assisted by a Professional Advisory Board. Minimum credit hour requirements in selected areas have been established which have improved the overall performance of most candidates. A long range plan for computer training has been established, with the goal of integrating computer technology into all technical,

graphic, studio and professional courses in the major. The program also has an honors program, one of the few for interior design in the nation.

In general, the curriculum appears to have been substantially improved and the program has responded to competency-based education related to accreditation requirements.

An attempt has been made to involve interior design students in the curricula of other programs on campus, most notably the architecture program. Some students have received credit for courses taken in other departments, with prior approval. Faculty have served as committee members in related departments, and students have been involved together in volunteer activities. Room remains for further cooperation among the programs.

Since the last review, the program has added another full-time faculty member, cooperative efforts have been established among the interior design programs in the state, a summer study abroad program has been established, the new Master of Fine Arts degree program has graduated its first candidate, and new courses have been developed and old ones revised. The structure of the curriculum is said to be better understood by students.

The goals for the future of the program seem well thought out, and include teaching critical thinking, building stronger verbal and visual communication skills, advancing the use of CAD, and assuring to teach the essentials of the interior design profession.

In order to meet the student needs of the next century, the

program has identified that faculty members must commit to providing a stimulating learning environment, engage in scholarly and creative activities, and remain professionally active.

The program has identified the need to improve its physical space, continue to evaluate student work regularly, and increase funding for graduate student stipends to enhance recruitment. The program has stated clearly its intention to remain committed to providing high quality instruction.

Florida International University: Interior Design

Since the last review, the School of Design has been created, as a response to the review. The interior design bachelor's is one of four programs in the School of Design, along with a masters of landscape architecture, a b.s. in architectural technology, and the master of science in environmental and urban systems which is being moved to the School from the Department of Civil and Environmental Engineering. Although the interior design program was scheduled only for a status update, the University Consultant did review and comment on the department as part of his site visit.

The School has proposed consolidating its two undergraduate programs, the b.s. in architectural technology and the b.s. in interior design into one program with two tracks. The consolidated program would award the bachelor of science in design. The University Consultant recommends instead the

renaming of the architectural degree as a bachelor's of design in architectural studies.

The last review indicated that the School should develop a "grand plan" for its future. The School responded in part with the merger of its two undergraduate degrees. Space was indicated as a problem, and some effort has been given to addressing this matter, but the additional space provided is some distance from the balance of the department's space. A longer term solution needs to be found.

In response to the earlier review, courses have been clustered to allow students to schedule their classes more efficiently. The earlier review suggested that there is a need for closer interaction among the programs. While some interaction has taken place, more opportunities need to be identified.

SUMMARY OF SYSTEM-WIDE ISSUES

FAMU/USF Cooperative Master's Program

The two programs currently operate independently from each other, and the Tampa program has developed a program that can stand alone. The consultants recommend that the current cooperative arrangement be ended, and that USF be permitted to offer the master's in architecture for non-architecture majors, but not be permitted to offer an undergraduate program. The

University of South Florida indicates its willingness to be responsible for the salary of the dean at Tampa, and the program at Tampa has indicated its academic readiness through its 1992 accreditation. That accreditation may well be threatened if the Tampa program is not separated from the FAMU program. Allowing the Tampa program to stand alone would mean that one more architecture program will be added to the state list of programs, but this would be only a paper transaction.

New Degree Program at Florida Atlantic University

The establishment of a 5-year bachelor's of architecture degree at Florida Atlantic University is not recommended for several reasons, not the least of these being the lack of a clearly demonstrated demand for the graduates of such a program. Until an independent demand analysis indicates that a substantial and continuing demand exists for architectural graduates in Florida, it would not be a wise use of state resources to establish another architectural degree program in Florida. In addition, there is an existing pre-architecture program at Florida International University which is serving southeast Florida.

Because of the number of architecture programs throughout the state, it might be more cost effective to provide additional financial assistance to students from areas not located near an architecture program in order to allow them to attend an existing architectural program.

The administration at Florida International has not invested the necessary resources into its architectural technology program. Should it decide not to invest to develop the program into a quality bachelor's in architectural studies or design program, then the State University System should consider the possibility of moving the bachelor's program in architectural studies/design to Florida Atlantic at Fort Lauderdale where the president has indicated his commitment to develop such a program.

While an argument is made for an architecture program at Fort Lauderdale because of placebound people, this does not appear to justify the investment for a new program in this region. It would be better to increase the scholarship levels to permit students to study at existing programs and/or to continue to encourage students to begin their architectural educations at Community Colleges and transfer to existing architecture programs.

The Need for Demand Studies and Control Totals

Although Florida is a growing state, there are limitations to the extend of demand for architecture and related programs. The State University System needs to develop a set of demand estimates for these professions in order to guide decisions about resource allocations. In none of the materials reviewed were there independently produced labor force estimates. It is not clear where the various programs indicating increased and continuing demand obtained their estimates. There may well be

additional demand growth, but it may not be sufficient to permit all requests, and they cannot solely be based on general growth trends in Florida.

UNIVERSITY CONSULTANT REPORTS

FLORIDA A & M UNIVERSITY ARCHITECTURE

PROGRAM

Currency of Curriculum

The curriculum in written outline form is adequate. The major problem is in implementation. The accrediting team in 1990 identified several areas of concern. These concerns are being addressed by the faculty but solutions are very slow developing.

Depth and Breadth of Curriculum

The five year bachelor of architecture and the four plus two master of architecture programs offer opportunities for a broadly based professional/liberal studies education. The accrediting team in 1990 stated that "... there is little evidence of students availing themselves of those opportunities." This is still true. The curriculum/program is still very professionally oriented and needs to incorporate the issues that will give the broader base.

Appropriate Number of Credit Hours to Degree

The credit hours for the Bachelor of Architecture - 162 hours - is in the range of hours for B.Arch programs (160-170). The credit hours for the master of architecture is also within an acceptable range.

Appropriate Community College Articulation

The School follows the articulation agreement as stated by the State of Florida BOR. There is no evidence of separate agreements between the school and any community colleges.

Appropriateness of Limited Access Status

Based on a shortage of space, on limited funds for expansion and on the difficulty to expand the existing building, the limited access status is appropriate.

Appropriate Use of Advisory Boards

There is no advisory board.

Linkage with Relevant Institutes/Centers

There seems to be little or no on-campus contact. The School of Architecture appears to be isolated from the rest of the campus.

Accreditation Status

The accrediting board in 1990 recommended a five year accreditation with annual reports. The School is attempting to respond to the concerns of the 1990 team, but there are some concerns that have not been addressed. A response to all items will be expected at the time of the next NAAB visit in the spring of 1995.

Pending Program Modifications

There is ongoing discussion on program modifications to correct NAAB concerns and to solve the problem of student retention. Also mentioned was the abortion of a program leading to the master's in landscape architecture. None of these plans were clearly articulated.

Response to Previous Review Recommendations

Many of the concerns of the accrediting team and the recommendations from the previous review have not been satisfactorily addressed. This lack of action seems to stem from a lack of direction from the administrative level. The most recent State University System program review of this discipline contained four major recommendations.

1. "While the School of Architecture provides multiple entry and exit points, it has become a complicated arrangement of degree programs (at least to this reviewer). It is recommended that the program provide a clearer definition of paths through the curriculum. There is greater strength in offering a few strong programs than attempting to attract students by offering many combination of programs."

There has been a positive response and, as the Curriculum Committee continues to meet, this will continue to undergo some modification. There is still the question of whether the two graduate programs are needed, especially the Master of Science in Architectural studies.

2. "With the shifting arrangements of professional programs in architecture in the state, there is an understandable nervousness about the pool of future applicants to the program. It is recommended that the school initiate a study of its image, its potential marketplace for applicants, and its relation to the junior college programs of the state toward an advanced program of focused student recruitment."

There is a focus on student recruitment and student retention as evidenced by the number of entering students and the number of "native" students entering the third year class. Additional work needs to be done in the areas of school image, market place for applicants, relations to junior college programs and a focused student recruitment program.

3. "Although the building is a new facility, several comments were made during the site visit to support the case for a post-occupancy evaluation of its fitness to the current teaching program. It is recommended that a faculty committee review the building and prepare a statement of needed improvements for consideration by the university administration."

This statement is still appropriate. Although some renovation has been done there is no evidence of a review or a statement of needed improvements to be submitted to the university administration.

4. "The FAMU/FSU (sic) Cooperative Program in Tampa requires attention to its administrative structure. It is recommended that an agreement be developed between the two universities and

BOR with clear lines of authority for program development and review, budget management, and faculty appointments. Although the current director of that program holds a position in the FAMU School of Architecture his proximity to USF seems to complicate the statements of the administration of the new program."

This concern seems to have been addressed. The Tampa program has been accredited and is prepared to exist separate from the FAMU program. It is the judgment of the reviewers that this change is appropriate and should be carried out.

STUDENTS

Appropriate Admission Standards

Admission standards are appropriate for the mission of the University and the School.

Appropriate Numbers of Majors

The numbers are appropriate for the current complement of faculty and for the available space. As the School addresses the problems of recruitment and retention, especially the entry into level two, the numbers should increase and will present a greater space problem.

Appropriate Number of Degrees Granted Yearly

The average number of graduates for the five year period 89-90 through 92-95 is 51. The number seems to be on the increase. The number of graduates at the B.Arch level (33 in 92-93) seems a

bit low. The number of graduates at the M.Arch level is low. This is especially true when reviewing the number of graduates with the bachelor's of science degree two years previously.

The state law requiring the professional degree may increase the number of students entering the graduate program. However, unless there is a definite difference in the emphasis of the graduate program, the reviewers question the value of that program over the five year program. There is no listing of graduates in the master of science in architecture studies. The value of this degree program is seriously questioned.

Passing Rates on Licensure Exams

The School does not have complete records for its graduates, so it is difficult to determine the passing rates on the professional exam.

Adequate Number of Teaching Assistantships and Stipends

The major problem is funding the positions.

Graduate Placement/Tracking System Devised

Graduate placement, based on BOR figures supplied, is fair. There is no tracking system in the School, so the numbers are questionable.

Provision of Clubs, Societies, Etc.

This is an area of no concern. Several clubs/societies exist.

Adequate Advising Services

Advisory service is identified for selection of courses and registration. No mention was made of advising for broader academic personal or professional needs. The system is not clearly articulated.

Appropriate distribution by Race and Gender

The distribution by race at the lower level seems appropriate. The number of African-Americans entering the second and third levels drops off drastically. The School is working to correct this situation and the numbers for 1993-1994 are much higher than before. Although not as serious, the School also needs to work on the recruitment and retention of women.

Summary: Students

There should be a planned program for the recruitment and retention of African-Americans and women including a broadly based advisory design to help the student understand and work through the system. Any emphasis on recruitment and retention could result in an increase in the student body which will impact space, faculty, equipment, number of graduates, numbers entering the graduate program, etc. This should be planned and orchestrated by the school administration and faculty.

FACULTY

Appropriate Number of Faculty

The faculty/student ratio (1:13) meets accrediting agency standards.

Distribution by Age, Rank, Gender, and Race

The age distribution is good with an equal distribution of faculty above and below the age of fifty. (Age 50+ = 50%, Age 40-49 = 30%, Age 25-39 = 20%.) The faculty is top heavy at the senior professional ranks with four assistant professors, eleven associates professors an six full professors. Thirteen of twenty one are tenured with eight on the tenure track. This does not leave much room for advancement through the ranks. There are three women on the faculty and five African-Americans. Focus on recruitment of women and African-Americans is needed.

Quality of Leadership

This is a School with one department and no official department chair. The Dean is responsible for total program administration. The line of administrative responsibility is such that there seems to be a gap between the Dean and the faculty, and response to School and faculty concerns seems to be slow or missing. This is not a hands-on administration, but one which delegates responsibility. The faculty is looking to the Dean to assume leadership and move with authority.

Appropriate Distribution of Faculty Effort

Teaching loads, committee participation and other responsibilities seem to be appropriately distributed.

Quality of Teaching

The quality of classroom teaching seems to be quite good. Teaching, however, must be considered in a broader context of advising and counseling. There seems to be a need for this broader approach especially at the lower level of instruction so that more students might clear the hurdle into the third year.

Quality of Scholarship and Publication

The record of scholarship and publication is extremely low. The School should develop a statement which would include architectural practice as an acceptable part of this unit's productivity criteria.

Contract and Grant Activity

Several faculty have been involved in contract and grant seeking. The overall faculty output is low and grant seeking does not seem to be a priority.

Internal Cooperation Within Unit

Cooperation is good, but could be improved.

External Linkages

External linkages with the University community have not been identified and seem to be missing.

Budgetary Provision for Faculty Development

The Dean has dollars in his budget for faculty development. According to some of the faculty, a large portion of the travel funds were used by the Dean and Associate Dean last year.

Salaries

Salaries for some of the tenured faculty, who have been at the University for some years, are low, particularly when compared to the salaries of the younger faculty hired recently. A marketplace equity study should be built into the budget to correct this inequity.

Summary: Faculty

Each of the items listed above fall within the purview of administrative responsibility/leadership. More direction must be given to the faculty to continue the positive elements and overcome the concerns raised by the faculty and the reviewers.

FACILITIES AND RESOURCES

Space

Office space is satisfactory. Space for teaching assistants is satisfactory. Classroom space is fair in quality and

quantity. There will be a great need for additional space if the student population increases. Laboratory space is tight. Two laboratories have already been converted to temporary studio space. Equipment is needed. There are not enough studio spaces to serve the current student body. Desks are needed and maintenance is extremely poor. With respect to provision of a student/faculty commons room, the students use the outdoor space between the buildings. Faculty use the conference room. There is no space large enough to accommodate a joint student/faculty meeting.

Library Quality/Quantity

Library reference materials and journal holdings just barely meet Accrediting Board standards. The major collection is of minimum quantity. The quality should be determined by a library consultant.

Equipment

There is a need for computers in faculty offices and in the computer lab. There is a definite shortage of equipment to service the school. This includes drafting tables and lockers for the drafting studios and equipment for the laboratories. This is a very critical need!

Adequate Office Expense Budget

No concerns were voiced in this area.

Appropriate Number of Support Personnel

The number of support personnel is currently appropriate and sufficient.

Summary: Facilities and Resources

There is a great need for classroom, laboratory and studio space. This need will increase if the student growth projections materialize. Library expansion space is needed. Building equipment, especially drafting room furniture, is a critical need.

The School library should be reviewed to determine specific needs and a planned acquisition policy should be implemented to take the library beyond the minimum status.

RECOMMENDATIONS

There is a need for a serious self-study conducted by the School administration, faculty, staff and students and the development of a critical plan for the evolution of the program over the next few years. It is necessary that this plan cover all of the areas of program, students, faculty, facilities and resources with budget projections for each. It is also critical that the Dean take the lead in this study and establish the broad umbrella for department goals, objectives and policy.

FLORIDA A&M CONSTRUCTION ENGINEERING TECHNOLOGY

PROGRAM

The construction engineering technology program at Florida A&M University has the proper depth, breadth, and currency in terms of course content. However, there seems to be a lack of laboratory depth, breadth, and currency of the program.

The sequence of courses should be rearranged in order to flow from the fundamental to the more difficult course work. Some courses should be combined in order to cover more concepts. An internship is listed among the technical electives as a required course. There seems to be some concern about getting an internship in order to satisfy this requirement.

The total number of hours for graduation is sufficient. The number of courses in each year should be looked at to see if the hours can be reduced for the first semester freshman.

Articulation between the community college and the university does not seem to be clear for the Construction Engineering Technology Program.

STUDENTS

An appropriate distribution of students by race and gender exists. Admission standards are appropriate in that the Construction Engineering Technology majors possess the regular admission standards for the University. The number of majors should be increased to meet the growing demand for construction

managers within the construction industry. A small number of students graduate from the Construction Engineering Technology program each year. A significant increase in the graduation rate should be a goal of the program.

The Associated General Contractors of America (AGC) student chapter is doing well on campus. An office is utilized by the organization to carry out its daily functions. More coordination should be made with the AGC student chapter and the local construction industry.

There appears to be some concern about students not being advised properly and not being sure of what to do about course selection during a given semester. Advisors should be available to help students register for the proper classes according to their curriculum guide.

FACULTY

The professional and academic qualifications of the faculty members are adequate for the mission and goals of the Construction Engineering Technology Program. There is a strong esprit-de-corps among most of the faculty, and a high level of dedication and support for the students. Faculty members feel a real sense of accomplishment from working closely with the students.

There is an appropriate distribution by age and rank of the faculty in the Program. However, the distribution of race and gender is not adequate.

The program leadership is extremely weak. Some members of the faculty do not have a clear identity with the program. A closer bond of mutual respect should be developed between the Program Coordinator and the Division Director.

Faculty teaching loads are excessive by universal standards. Added faculty would permit more flexibility in teaching assignments. Faculty qualifications are well matched with teaching assignments. However, some faculty members have had to teach quite a few courses during their careers. The faculty is small in number due to the size of the program; thus, there is less flexibility in teaching assignments.

Quality of scholarship and publication is very limited. The faculty would like to have more opportunity for up-to-date industry experience, consulting, research, publication, travel, and participation in professional associations.

There appeared to be a general satisfaction of the faculty with their students and classes. However, the faculty find it very difficult to get material typed from their clerical staff.

There is excellent cooperation between the Construction Engineering Technology Program and other departments or programs offering supporting courses. Students seldom encounter problems with support courses availability or relevancy of course content. There are excellent support services on campus and these groups have a very high regard for the program.

Budgetary provision for faculty development is extremely weak. More provision should be made for faculty to attend

workshops, seminars, etc. related to the construction industry. Faculty salaries are very low compared with peer institutions and programs.

FACILITIES AND RESOURCES

The Construction Engineering Technology Program is fortunate to have its own modern building for offices, classrooms, and labs. The space is efficiently arranged and used. All administrative and faculty offices are roomy and comfortable. They offer adequate space for work and private meetings with students.

The program's computer laboratory is spacious, but lacks modern equipment and adequate hours of operation. Accessibility to the computer lab would be improved by leaving it open at night and providing monitoring staff other than faculty. Software for estimating, scheduling, and project management does not exist.

The main library has a good cross section of books and periodicals in the collection supporting the program. However, the audio/visual collection is very weak. There is a need to obtain more books and periodicals that are state-of-the-art and relative to the construction industry.

The Technology Library is also very weak as it relates to construction engineering technology. There should be more books and resource material related to the construction industry. Current books are out of date, thus, they are of little or no value for the modern construction worker.

The laboratory equipment appears to be adequate in satisfying the goals of the Program. Such laboratories as drafting, construction model, surveying, strength of materials hydraulics, and soil mechanics are sufficient. However, most of the equipment is not of the type students will experience in the construction industry. More attention should be given to securing equipment that is utilized in the construction industry.

Office expense budget and support does not meet the demanding needs of a construction engineering technology program. Supplies and equipment, both office and laboratory, are seriously lacking. In order to meet the basic needs for office supplies and materials, more dollars should be placed in these budget lines.

There should be sufficient clerical and support staff to assist the faculty in carrying out their responsibilities. A dire need for more efficient office personnel is of the utmost necessity.

RESPONSES TO PREVIOUS PROGRAM REVIEW RECOMMENDATIONS

Since the last review there has been a shift from the architectural/construction engineering technology and the civil engineering technology option to form the construction engineering technology program. This program provides a broad-based undergraduate education in the technology and management of construction operations.

In order to be more viable, the program will be expanding

into a second option called construction management. This option is being designed for students with greater interest in the business and management aspects of the construction industry.

STRENGTHS, NEEDS, RECOMMENDATIONS

Strengths

1. The faculty's dedication, loyalty, commitment, and great attitude are tremendous assets.

2. The program has ample building space for classroom and laboratory activities.

3. The University's support services, admissions, career placement, library, building and grounds, etc., are satisfactory.

4. The upper administration has demonstrated a positive commitment to the long-term success of the program.

5. Students appear to possess a strong commitment to the programs as well as to careers within the construction industry.

6. The University's general education program attempts to ensure an excellent, diverse education for every student.

Needs

1. The identity, mission, goals, and name of the program are confusing and not clearly defined within the current organization.

2. The program needs more computers and software dedicated to the construction laboratory.

3. Industrial equipment and faculty travel budgets need to be increased significantly.

4. More support staff for teaching, laboratory, and clerical assistance is needed.

5. Little or no developmental opportunities in such areas as sabbaticals, professional consulting, research, publications, and travel are provided for the faculty.

6. Teaching loads are excessive.

7. More diversity in classroom examples in terms of residential, commercial, and industrial construction projects is needed.

8. There is a dire need to market the program to the construction community.

Recommendations

1. A formal evaluation of the construction engineering technology Program should be established. Feedback from graduates and employers should be strongly sought.

2. The new curriculum guide or University catalog should be more explicit in terms of courses required for the program.

3. A long-range plan should be put in place with input from faculty and students.

4. More effective leadership needs to be put in place at the divisional level.

5. More monies need to be provided for faculty travel to professional meetings.

6. More up-to-date laboratory computer hardware and software are needed.

7. The program should be marketed more to the local construction industry.

8. There should be more information about the accuracy of majors in the program. Therefore, it is recommended that a

better understanding of the admissions procedure be established.

9. A clearer organizational chart should be developed to better understand the Division of Engineering Technology.

UNIVERSITY OF FLORIDA COLLEGE OF ARCHITECTURE

OVERVIEW

There have been impressive improvements in the College of Architecture programs since the last review by the Board of Regents. These changes can be seen in the new administration, the new and renewed graduate programs, and especially in the new directions in research. These major developments have been accomplished in a relatively short period of time with little increased support in positions or salaries and with virtually no increase in physical space. Most of the academic units of the College have achieved a higher level of recognition and distinction among their peer programs. Dedication of the new administration, renewed sense of purpose, varied off-campus programs and research initiatives point toward a rich diversity of professional programs to meet the stated goals of the College in teaching, research and service.

Since the last review a new dean, three new unit heads, and several program directors have been appointed. These external appointments have brought new directions and new enthusiasm, while the two continuing chairs (interior design and landscape architecture) have maintained continuity of leadership.

The new administration has created a strong sense of academic management of programs. As this is one of the largest colleges of architecture in the country, it is imperative that communications, decisions, and priorities be clearly stated and

responsibilities clearly defined. In a faculty of over a hundred positions, the critical reviews of activities and promotion of the programs must be carefully organized and implemented. Although the faculty has many senior members that continue to serve the college, there is a healthy sense of growth and change within the college.

PROGRAMS

The increased attention to the graduate programs within the College has been an important direction for the future. The establishment of the Ph.D. program adds distinction, intellectual challenge, and a research potential that will be essential to building depth within the professional programs. The structure of this program encourages connections among faculty of the various units to participate in student's research and creative endeavors. The rebirth of the graduate level program in architecture has made impressive strides in added depth of design investigations and creative explorations.

The new developments in the graduate program in planning are equally significant. This program has a long history of community design and has provided an vital resource for the state of Florida, and the new research activities of the department have brought its professional degree programs in planning to a current edge with the development of its electronic data systems. The proposed graduate program in interior design will add another critical dimension to the research arm of the college.

The connections between research and graduate education have provided new opportunities to the programs in both planning and construction. The research centers in the school of construction bring new dimensions to that graduate program and, again, link the professional field of construction, professional education, and issues of society such as affordable housing and fire hazards. The work in architectural science in acoustics is important and the development of GEO-PLAN in the planning department adds to the extension of the college into the future of the state.

Off-campus programs have long been an important dimension for the college, its faculty, and students. New leadership in these programs are building relations between the academic programs of the college and the potential for connections to their regions. Although relatively small, the programs in Italy, Nantucket, and the Caribbean have provided an important dimension for the College through the personal leadership and commitment of faculty members. The current attention to these programs, together with the new Miami Beach studio, provide an opportunity for serious review as to the intentions, potentials, and accomplishments of these off-campus commitments.

The academic programs of the College appear to be current and well developed by the faculty. Continual reviews and evaluation by the faculty take place and are directed by the administrators of the various units. The credit hours for various curricula are appropriate to the discipline and all

programs are accredited by the appropriate agency.

The admission procedures are clear but require a type of portfolio review for admission to upper levels of the undergraduate design programs. The stated criteria in all design programs must be clear and appropriate, including alternate routes for students. In recognition of the number of applicants to upper level including the transfer applicants, review of those processes is needed. The design programs within the College have articulation understandings and agreements with various community colleges. While these are appropriate to limited access programs, attention does need to be given to a closer working relationship of course evaluation and student application and transfer procedures.

STUDENTS

The enrollment of the College places it among the largest in the country. The admission and review processes monitor student progress in the programs. However, questions of the maintenance of quality in all design sections and all programs must be raised. The tutorial system of design education is faculty/critic intensive and the dimensions of size become an issue of quality management.

The surprising isolation of students in the various programs of the College, even among the design fields, may be a result of size but often seems to be one of attitude to the students . There needs to be an increased attention to joint programs,

faculty appointments, and project identification to provide further opportunities for interaction among students in the various departments of the College.

There is a surprising lack of racial and ethnic diversity within the College. The students and faculty are aware of these issues and are attempting to develop recruitment strategies for a broader multicultural student body. While this is part of a national problem among design schools, a state university in Florida should be positioned better to attract and sustain minority students at both the graduate and undergraduate levels.

FACULTY

The dedication of the faculty is impressive despite the lack of salary increases over the past three years. Current salary levels place programmatic quality and the maintenance of academic development in jeopardy. Attention must be paid to this primary issue.

A healthy distribution of faculty exists in terms of age, rank, and service to the college. There have been recent retirements among senior faculty, and new additions have been important to the life of the academic programs. There is less diversity in terms of gender and race than one might expect. As in the case of the student profile, this is a national problem but one that state universities have a special opportunity to address.

As noted above, the increased amount of research and funded

programs is impressive in all units of the College. In absence of state appropriated support, the promotion of sponsored programs has become critical for support funding, and many of the faculty have accepted the challenge to develop those opportunities.

The general quality of scholarship and publications seem to be of a high quality and appropriate to the field. Given the current economic conditions there is less opportunity for young designers, and many are turning to theoretical rather than applied activities. While this may be very desirable for academic programs, the long life of faculty development needs to be supported for continuing professional growth.

FACILITIES AND RESOURCES

While the programs of the College are housed in a group of buildings in immediate proximity to each other, there is little room for expansion or internal reallocation. The growth of the research programs will require additional space and the development of graduate programs will demand additional studios . There should be initial programming approval followed by College and university attention to these needs.

The important area of electronic media, primarily in computer graphic technology, is critical for the future of the quality of academic and research activities. The College is fortunate in its early commitment to computer education; however, there is little evidence of growth of this area or, more

importantly, integration into the academic programs, particularly studio processes. The GIS program in planning and the construction data banks are important research tools and point well toward the future. Graduate programs in Landscape Architecture and Interior Design are equally demanding of access to these developing tools. Programming now for the future integration into the traditional studio methods is critical.

The library is another vital support to the programs of the college that requires attention. The balance of reader spaces and book storage together with new media materials in all of the arts and technologies related to the college is impossible to maintain at a desirable level.

RESPONSE TO PREVIOUS PROGRAM REVIEW RECOMMENDATIONS

While there have many accomplishments within the programs during the past five years, there are four general issues identified in the previous report that have had limited attention or remain to be addressed within the College. They are (1) the integration of academic programs and professional overlaps, (2) graduate funding to provide competitive recruitment, (3) eventual implementation of a graduate program in interior design, and (4) facilities of the College are limiting academic development.

RECOMMENDATIONS

1. The College should develop a strategic plan for its future. The College has developed many new initiatives and

directions. It is unclear as to the depth of these research, academic, and outreach programs. The strategies, priorities, interrelations and management processes are critical for their future development. The College should enter into a thorough strategic planning process combining assessments of future program developments with linkages to research and other units of the university, on and off campus. Such a process would define faculty size and expertise, student enrollment goals, and facility requirements.

2. The College should review its enrollment targets and patterns. The size of the student enrollment in any design program raises questions as to professional job opportunities in a rapidly changing market. It also raises questions as to "quality management" of the design studios and ability to maintain high standards of student performance. The proper sizing of the design programs should be a major part of the strategic plan.

3. The College must articulate its criteria for admission to the upper division. Admission to the upper division of the design programs is unclear and needs definition and attention to academic paths. Careful review as to criteria, procedures, advising, articulation and management is required.

4. The College should develop new models of design education. In recognition of the large numbers in the studio courses, there should be a search for other formats and "delivery systems," especially for those foundation courses. There is a surprising lack of innovation and experimentation in the process of design education.

5. The College should continue to work to integrate its different departments. There is a remarkable richness of activities in teaching and research within the College and although there is evidence of some integration, the administration and faculty should search for integrative activities to allow divisions between departments to be lowered.

PROGRAMS

The School of Design at Florida International University contains undergraduate programs in architectural technology and interior design, and graduate programs in landscape architecture and environment and urban systems. While the programs in interior design and in environment and urban systems were not slated for specific study during this review, the University Consultant did look at these programs as they relate to and support the undergraduate architecture program and the graduate landscape architecture program. Together, the four programs constitute a comprehensive collection of design-related degree offerings in the same collegiate setting.

The comprehensive nature of the school is a great asset, with each program benefiting from the other. Symbiotic relationships exist throughout the School that provide economic efficiencies and a greater than normal depth and breadth of curriculum than would be found where programs stand alone. The curriculum in the architecture and landscape architecture program is current, well organized, properly sequenced, and appropriate to the degree offered.

Generally, the number of credit hours is also appropriate to the degrees offered, but determining the number of credit hours required to graduate was difficult to understand in any comparative sense. This situation is exacerbated by the large

number of transfer students entering the programs from a variety of different institutional settings and bringing an equally varied number of prior earned credit hours. The undergraduate programs in the school have established highly effective articulation agreements with Miami-Dade and Broward Community Colleges. There are no limited access programs in the school. The landscape architecture program recently received full accreditation from the Landscape Architectural Accreditation Board. Programs in the school are well linked to institutes and centers on the FIU campus, and an active School of Design Advisory Board is in place.

STUDENTS

The student population is incredibly diverse in age, gender, race and national origin. Within the FIU institutional setting this is to be expected. It should be pointed out, however, that few Colleges/Schools of Design in the country can boast of such diverse student populations, while the market place is experiencing greatly increased demand for such students. The School is uniquely positioned to not only serve the Miami-Dade market but to place graduates in urban centers throughout the country. Interviews with recent graduates of the school and local employers of graduates clearly showed that graduates are quickly and meaningfully employed and that an unmet demand for graduates exists.

Admission standards are appropriate and the number of majors

in architecture and landscape architecture are appropriate to the level of current resources. Both programs have the potential to grow substantially, but resource allocations from the University would have to match this growth. There is little room for growth with the current resource allocations.

Student work in both architecture and landscape architecture was reviewed and found to be quite good and certainly competitive with work from similar programs throughout the country. Interviews with current students revealed a high level of enthusiasm for the programs, but clear concern was expressed for space and computer deficiencies.

FACULTY

Interviews and a review of faculty credentials indicates a highly dedicated, exceptionally well qualified and somewhat overworked faculty. Faculty numbers are appropriate to the student population and the degrees offered. A high level of inter-program cooperation exists and the different faculties hold an equally high level of respect for their colleagues in the other disciplines. Teaching quality, as determined by the student work reviewed and testimony of recent graduates and employers, is exceptional. School and program leadership got good grades from the faculty, students, alumni, and others interviewed.

Review of the School budget and an examination of faculty salaries indicate that virtually no resources are available for

faculty development; and salaries, while close to national norms, are deficient in the Miami-Dade cost of living environment.

All faculty are engaged in research and/or creative endeavors and maintain a high level of currency through practice activities. The faculty composition reflects the diversity of the student body.

FACILITIES AND RESOURCES

The quality of the space occupied by faculty and students of the School was judged to be good. The amount of space available, however, just barely meets the current need and is not well consolidated. Several studio spaces are located in a metal building rather far removed from administrative and faculty offices, preventing ongoing interaction between students and faculty and between students in the different programs. Current space allocations allow no room for program growth, and inhibit the growing demand for computer aided instruction.

The School has been highly creative in finding the resources necessary to purchase computer hardware and software for instructional purposes and for faculty use, but no resource enhancement plan is in place that accommodates technology expansion or replacement.

Library holdings were found to be quite adequate, and library building expansion plans for the near future will allow for continued upgrading of the holdings. Support staff and office expense budget is realistic given current faculty and

student numbers, but will need to be enhanced if the programs grow.

RESPONSE TO PREVIOUS REVIEW RECOMMENDATIONS

The recommendations contained in the previous review of the architecture and related disciplines in the College of Engineering and Applied Science have been well responded to. Most notably, the architecture, landscape architecture and interior design programs have been placed in a new academic unit: The School of Design, with its own director. While this unit reports to the Dean of the College of Engineering and Design, it has a considerable amount of autonomy. The master's of landscape architecture has been fully integrated with the School of Design and received full accreditation in March of 1993.

The only recommendation of the previous review that has not been fully accomplished, and remains a problem today, is the lack of dedicated and consolidated space for the programs in the School. Recommendations in the previous review regarding space are reiterated and expanded as a part of this review.

CONCLUSION

The School of Design at Florida International University is a small but reasonably healthy comprehensive design school. The School is uniquely positioned in a highly diverse major metropolitan area with considerable pent-up demand for the offerings in place. This demand has been dampened by the prior

lack of accreditation in the master's of landscape architecture program and by the current title given to the four year pre-architecture program. A significant jump in enrollment has already been experienced in the very short time since accreditation was given to the landscape architecture program.

The current title given the degree in architecture (Architectural Technology) has a trade school connotation and does not accurately reflect the curriculum or employment of the graduates. While an in depth review of the interior design program was not a part of the consultants responsibilities, an overview of this program showed nearly one hundred students with only one full time core faculty person. Combining the first two years of the interior design program with the same two years in architecture is currently proposed. This will provide the interior design program with additional FTE faculty support and represents a very creative use of resources. Adoption of this proposal is recommended, but additional support to the interior design program will be needed.

RECOMMENDATIONS

1. The University, College and School should clearly articulate a long term goal of fully developed and accredited professional programs within the school. The University's Master Plan should reflect this goal. As demand and resources allow, the architecture program should be structured around a 4 year non-professional undergraduate

program and a 2 year accredited Master of Architecture program. The interior architecture program should move toward F.I.D.E.R. accreditation as quickly as possible. The master's in environment and urban systems should be re-examined to see if it has the potential, with minor modifications of title and curriculum, to seek accreditation from the Planning Accrediting Board.

Long term goals and objectives should also include examining the demand and opportunity to develop an accredited undergraduate degree in landscape architecture. Finally, when critical mass is reached (500-600 students, 30-40 FTE faculty) College status should be considered by the University administration.

2. Concerns about space, faculty salaries, faculty development funds, and technology needs may not be solvable in the short term. This reality is causing faculty and student distress. To address this it is recommended that the Provost, Dean of the College of Engineering and Design, the School and program directors and representatives of the faculty and student body meet to formulate a rational plan that aims at solving the problem over the years ahead. This plan should consider current resource shortfalls as well as those caused by program growth. Within this same context, it is recommended that procedures be designed and employed to evaluate programmatic quality and progress against a

selected group of similar peer and aspirant academic units across the country. To accomplish this, techniques currently used to account for FTE vs. headcount student numbers, credit hours needed for graduation, and budget tracking by program would need to be standardized.

3. Change the name of the undergraduate program in architecture from a bachelor's in architectural technology to a bachelor's of design in architecture.

4. Maintain the bachelor's in interior design degree designation. Immediate attention should be given to increase the number of core faculty in the interior design program as required by F.I.D.E.R. accreditation standards. The program should move toward accreditation as quickly as resources allow.

5. Actively promote the master's in environment and urban systems program. This is not a space intense program and can be expanded considerably within the context of current resources.

6. Continue dialogue with the Construction Management Department concerning its possible location within the School of Design. It seems to make sense to recognize this

already symbiotic relationship by combining all the related programs in the same academic unit in the near future.

FLORIDA INTERNATIONAL UNIVERSITY: CONSTRUCTION MANAGEMENT

As the chairman of the ACCE accreditation team which visited the FIU construction management program in 1989, the University Consultant has been familiar with and had an opportunity to follow the department over the last four years. There has been remarkable progress made in the quality of the curriculum, the quality of the graduates, and the quality and productivity of the faculty, Of the more than 150 construction management programs in the United States, this program is one of thirty-three programs that are accredited. This indicates that the program is as good or better than over 75% of the programs in the United States. This progress has been accomplished despite the minimal resources allocated to the program, which pale in comparison with those of similar programs at peer institutions.

The department was created in 1973 and has experienced many changes in its organizational structure. The department currently exists within the College of Engineering and Design as a separate entity from the Schools of Engineering and Design. The current organization gives the department the autonomy that it needs to fulfill its mission. In addition, the department has maintained its educational relationship with the School of Design.

PROGRAM

The overall mission and goals of the department are consistent with the needs of the construction profession. The

depth and breadth of the program is meeting needs of the construction industry and the students that are enrolled in the program. This is maintained by a consistent use of an advisory committee and by the development of articulation agreements with surrounding community colleges. In addition, the department is meeting the needs of the somewhat placebound nature of the students by offering many courses at the Broward Community College campus.

A considerable amount of confusion exists as to the number of credit hours required in the core curriculum requirements. For an entering freshmen, the curriculum requires 138 credit hours. Even though the construction Management degree is comparable in the number of credit hours to those in the School of Design, it is recommended that the minimum number of credit hours be reduced to 132.

It is necessary for the department to meet the requirements of the University core requirements and the minimum requirements of the ACCE. The University core requires two additional credit hours plus the foreign language requirement. In addition, the physics with laboratory taught at Florida International University is a total of five credit hours. This is one additional hour above the requirements of ACCE.

The graduate program has shown considerable growth over the past several years. The students are qualified for admissions to perform graduate work, they are enthusiastic about the program, and the program is serving a need to the profession.

STUDENTS

The student body is one of the most diverse in the United States. A good mix of both gender and race exists. Over fourteen countries are represented in the student population.

The student admissions, number of majors, and degrees granted yearly is consistent with other peer institutions. In addition, the department has provided membership opportunities to students in the appropriate construction professional organizations.

The students felt that the advising and counseling was good. The professor in charge of the counseling has received an award for excellence in advising from the University.

FACULTY

After discussions with students and faculty and the review of student work, it is evident that a good job is being done with regard to teaching. The faculty exhibits diversity in academic, professional, ethnic, and cultural backgrounds.

The construction management department has achieved an extraordinary growth in research in the last 4 years. The faculty has submitted 55 proposals totalling over $1,700,000 and have received or have had approved over $370,000 in funding with $240,000 currently pending action by funding agencies. All of these proposals have been competitive in nature and have been submitted to a broad spectrum of funding agencies. The 25% success ratio and dollar volume attained is outstanding when

compared to all other ACCE accredited construction education programs in the U.S. The quality and significance of the product of this research has been demonstrated by its repeated use by government agencies. This reviewer has not observed any other department of construction education with such a wide ranging impact on government regulation as it relates to the state's construction industry.

The department has also published and/or presented an exceptional number of scholarly works in a broad variety of technical and professional publications and conferences.

Faculty involvement in post hurricane recovery efforts earned the department the respect of the community, the construction industry, and governmental agencies. It is evident that the department is recognized as the authoritative source for construction knowledge in South Florida. Underscoring this recognition was the request from the Dade County Cable Television Access Project for the department to produce and host a weekly television show. This show, which started out as a series of 30 minute pre-recorded hurricane related programs, has been expanded to a one hour live call-in show on a wide range of general construction related topics. This reviewer had an opportunity to view tapes of this show, and it is a remarkable and unique undertaking of invaluable significance to the community, the University, and the department.

Department faculty are contributing to the University, the community, and their profession through a wide variety of service

activities. These include directorships and active committee memberships in the American Council For Construction Education, the Associated Schools of Construction, the Project Management Institute, and the American Association of Cost Engineers, the American Association For Artificial Intelligence, the American Society of Civil Engineers, the Florida Engineering Society, and others. Active involvement in these organizations provides valuable national exposure to the department and university. Department faulty are also actively involved in numerous university service activities.

The above accomplishments are obviously the result of hard work and effort by individual faculty members; however, two significant events created the conditions that made these accomplishments possible. The first was the 1989 formation of the Department of Construction Management, resulting in an independent unit with a defined identity, mission, and singularity of focus. The second was the hiring of the current chair, now in his fifth year as leader of the department, who has provided strong leadership and has set an example for the faculty through his outstanding personal performance in scholarly activities, research, community impact and services.

Promotions and salaries have not kept pace with other institutions. The salaries are some of the lowest in construction education.

FACILITIES AND RESOURCES

The department is severely lacking in space. The only space allocated to the department is for faculty offices. Each faculty has space for a desk and book storage. Their are no dedicated laboratories, classrooms, computer facilities, TA office space, or storage rooms. The department owns several computers for student use. However, adequate space does not exist for their use.

Only one support staff member is available for the undergraduate, graduate program, and administrative functions.

RESPONSES TO PREVIOUS PROGRAM REVIEW RECOMMENDATIONS

The diversity of the highly qualified faculty and the accreditation of the department has been maintained. However, the concern on computer availability has not been properly addressed. Over the years the question of space available for computers has been varied. Currently no workable space is available. This is unfortunate because some of the greatest advancements in construction management are going to be in the area of computer applications.

The establishment of the graduate program has turned out to be an excellent decision. The program is meeting the needs of the local urban population and providing research as it relates to the regional needs of the construction industry.

STRENGTHS, NEEDS, AND RECOMMENDATIONS

Strengths

1. Quality of the graduates
2. Quality of the leadership
3. Quality of the graduate program
4. Quality of the research and public service
5. Quality of the faculty

Needs

1. Dedicated computing facilities
3. Lack of laboratory, storage, and TA office space
2. Faculty salary levels

Recommendations

1. Increase the graduate enrollment.
2. Place more emphasis on computer usage in the curriculum
3. Lower the number of credit hours required for the undergraduate degree to 132.
4. Provide for more laboratory, storage, and TA office space.
5. Attend to faculty salaries.

APPENDIX

LEAD CONSULTANT'S VITA

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3807 Tuxedo Rd., N.W.
Atlanta, Georgia 30305
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TEACHING AND ADMINISTRATIVE EXPERIENCE

President and Professor of Public Administration and Urban Studies, Georgia State University (July 1992 to present).

Vice President for Academic Affairs and Professor of Political Science and Public Administration and of Geography and Planning, University of Toledo (September 1989 to June 1992).

Dean, School of Architecture and Urban Planning, and Professor, Departments of Architecture and Urban Planning, University of Wisconsin-Milwaukee (August 1983 to September 1989).

Visiting Professor, Huazhong University of Science and Technology, Wuhan, Hubei, The People's Republic of China (September 1988).

Visiting Professor, Gadjah Mada University, Yogyakarta, Indonesia (1985 to 1988).

Head, Department of Urban and Regional Planning, University of Illinois, Urbana (August 1979 to August 1983; Acting Head June 1978 to July 1979).

Director, Bureau of Urban and Regional Planning Research, University of Illinois, Urbana (January 1977 to December 1979).

Professor, Department of Urban and Regional Planning, University of Illinois, Urbana (August 1982 to August 1983).

Associate Professor, Department of Urban and Regional Planning, University of Illinois, Urbana (August 1977 to July 1982).

Assistant Professor, Department of Urban and Regional Planning, University of Illinois, Urbana (September 1970 to August 1977--on leave August 1973 to June 1975).

Fellow, Resident Studies Program, Center for Advanced Study, University of Illinois, Urbana (September 1973 to June 1974).

Instructor, Department of Urban and Regional Planning, University of Illinois, Urbana (September 1968 to August 1970).

Teaching Assistant, Department of Urban and Regional Planning, University of Illinois, Urbana (September 1967 to June 1968).

EDUCATION

Ph.D., Public Policy, Graduate School of Public Policy, University of California, Berkeley, 1976.

Master of Public Policy, Graduate School of Public Policy, University of California, Berkeley, 1975.

M.A., Public Administration, Department of Political Science, University of Illinois, Urbana, 1970.

Master of Urban Planning, College of Fine and Applied Arts, University of Illinois, Urbana, 1969.

B.S., Community Planning, College of Design, Architecture and Art, University of Cincinnati, Cincinnati, Ohio, 1967.

PROFESSIONAL PRACTICE EXPERIENCE

Consultant, Central Atlanta Progress, Inc. (1989 to 1990). Consultation with Design Competition Services, Inc. on the development of an international competition to redesign Peachtree Street and Auburn Avenue.

Vice President, Planning and Design Institute, Inc. (1988 to 1990). Preparation of planning, design and development analyses for various units of government and the private sector. PDI enables faculty members and other professionals to engage in innovative professional group practice.

Consultant, Trinity College of Vermont (1989). Development of a campus long range program and master space plan. Included demographic, academic program and space needs analyses.

Consultant, Emery Interests, Cincinnati, Ohio (1985 to 1988). Analysis of economic and demographic conditions and trends for the Cincinnati Metropolitan Area as a basis for real estate investment and land development decisions.

Consultant and Visiting Professor, Gadjah Mada University, Indonesia (1985 to 1988). Assistance in development of a program to improve undergraduate and graduate architectural education and to develop a research and computing capability, through the Midwest Universities Consortium for International Activities.

Consultant, American Council on Education, Washington, D.C. (1980 to 1984). Development of case studies for and lecturer in Leadership Training Workshops; anchor and presenter for Teleconference pilot program on issues in higher education; manuscript reviewer.

Consultant, American Planning Association, Chicago, Illinois (1977 to 1979). Eight-city capital investment policy project--field methods and data analysis; rural planning project--transportation and housing/community services element.

Consultant, Abt Associates, Cambridge, Massachusetts (1977). Study of institutional career change practices and early retirement programs in business, industry, government and academe.

Consultant, Gerontological Society, Washington, D.C. (1977). Evaluation of the Gerontological Society's Media and Aging Workshop program in three cities.

Research Associate, Graduate School of Public Policy, University of California, Berkeley (Summer 1975). Study of Effectiveness of Alternative Communication Systems for Older Persons.

Consultant, Office of the Vice Chancellor, University of California, Berkeley (1974). Study of non-print instructional media policy for the Berkeley campus.

Principal Planning Associate, Richardson, Severns, Scheeler and Associates, Architects, Champaign, Illinois (June 1968 to August 1973). Campus planning and site design for three universities; planning and physical design for the State of Illinois Capitol Complex; plans, programs and site designs for several private developments.

Consultant, City of Sidney, Ohio (1967). Central Business District Design Guides--graphics and signage.

Consultant, West College Hill, Ohio (1966 to 1967). General community development plan--analysis, physical plan, site design, and implementation plan.

Planner, Ladislas Segoe and Associates, City Planners and Consulting Engineers, Cincinnati, Ohio (April 1966 to September 1967). General comprehensive planning for numerous towns and cities.

Planning Intern, Baltimore Urban Renewal and Housing Agency, Baltimore, Maryland (August 1964 to January 1966). Background analysis for several redevelopment projects, including Charles Center, Inner Harbor and Harlem Park.

Draftsman, Rough Brothers, Greenhouse Designers and Manufacturers, Cincinnati, Ohio (December 1963 to July 1964). Preparation of schematic designs and working drawings for prefabricated commercial greenhouses.

SELECTED GRANTS AND CONTRACTS

Trinity College of Vermont (1989 to 1990). Contract to prepare a Year 2000 Campus Master Program and Space Plan. (With Higher Education Executive Associates, Inc.) Included analysis of the internal and external environments, college mission and goals, enrollment and marketing possibilities, relationship to other institutions, and physical space needs and locational analyses. School of Architecture and Urban Planning (SARUP) portion of the contract was $20,000.

Euroactividade A.G. (1989). Grant to prepare a concept plan for the Jones Valley in Wisconsin, to link together the planned Euroactividade resort and the Springs golf course with Frank Lloyd Wright's Taliesin, the Spring Green Restaurant, the American Players Theatre, and Aldebaran. (With Robert Greenstreet and G. William Page.) Six month project. $25,000.

Milwaukee Area Technical College (1988 to 1989). Contract to prepare a long-range development plan for the College district. (With Conta and Associates and Schroeder-Piwoni.). SARUP tasks included demographic analysis, enrollment projections,

programming and service projections, grounds and facilities evaluation and conceptual development. SARUP portion of the contract was $39,000.

Taxman Investments, Inc. (1987). Grant to conduct a student design competition for alternative uses of an older commercial structure in downtown Milwaukee. $4,800 in administration and prizes.

Midwest Universities Consortium for International Activities--World Bank Funds (1985 to 1988). Two and one-half year sub-contract to assist in the development of a program to improve undergraduate and graduate architectural education and establishment of a research program at Gadjah Mada University, Yogyakarta, Indonesia. $270,000.

National Endowment for the Arts (1984 to 1989). Grant to plan and conduct an international competition to plan and design the city of the future. With Professors Larry Witzling and Jeffrey Ollswang. Multiple-year project, culminating in plans and designs for Milwaukee for the year 2020. $50,000.

International City Design Competition (1984 to 1989). Funds to help finance the International City Design Competition. With Professors Larry Witzling and Jeffrey Ollswang. Support from the Lynde and Harry Bradley Foundation, the Milwaukee Foundation, Wisconsin Electric Power Co., Northwestern Mutual Life Insurance Co., Wisconsin Bell, Wisconsin Gas and Sta-Rite Industries, Mortgage Guaranty Insurance Corporation, Time Insurance, Faison Associates, Wisconsin Society of Architects, WMVS-TV/WMVT-TV, Midwest Express Airlines, City of Milwaukee, Milwaukee County, and the State of Wisconsin. $450,000.

Johnson Foundation (1984). Funds to hold a Wingspread Conference to develop the competition program for the International City Design Competition. With Professors Larry Witzling and Jeffrey Ollswang. An international conference. $25,000 in in-kind services.

U.S. Army Corps of Engineers, Construction Engineering Research Laboratory (1984 to 1985). Task order to conduct research on up to 18 areas. With Professor Gary Moore and six other faculty members. $118,000 in individual contracts for specific work negotiated against a maximum task order of $2,000,000.

Milwaukee County (1984 to 1989). Contracts to develop citizen consensus on a plan for the Milwaukee Lakefront Terrace and development of an urban design concept. With Professors Larry Witzling and Harry Van Oudenallen. Initial project involved six SARUP faculty members. $135,000. A *Progressive Architecture* urban design award for this project was received in 1987. Additional contracts for design refinement and facilities programming, $65,000; fundraising contract to provide $5.5 million in enhancements, $385,000. Groundbreaking for this $32 million project occurred in August 1989.

Wisconsin Department of Transportation (1985). Grant to conduct a study of methods for multi-objective decision making for use in state highway transportation analysis and planning. With Professors Ernest Alexander and Larry Witzling. $27,500.

Samuel Stone Family (1984 to 1985). Grant to conduct a competition to design a $1.25 million residence house for the University of Wisconsin-Madison by the School of

Architecture and Urban Planning, University of Wisconsin-Milwaukee. $15,000 in administration and prizes. The residence house opened in September 1986.

University of Illinois (1977 to 1983). During this period at the University of Illinois at Urbana, I obtained more than $1 million in external grants from various agencies, including the U.S. Army Corps of Engineers, the National Science Foundation, and the Illinois Humanities Council.

PUBLICATIONS

Books

Quick Answers to Quantitative Problems: A Pocket Primer (Co-author with G. William Page). Boston: Academic Press, 1991.

Spontaneous Shelter: International Perspectives and Prospects (Editor). Philadelphia: Temple University Press, 1988.

Basic Methods of Policy Analysis and Planning with *Instructor's Manual* (Co-author with David Sawicki). Englewood Cliffs, New Jersey: Prentice-Hall, 1986. Revised second edition, Spring 1993.

The Metropolitan Midwest: Policy Problems and Prospects for Change (Co-editor with Barry Checkoway). Urbana: University of Illinois Press, 1985.

Academia in Transition: Mid-Career Change or Early Retirement (Author). Cambridge: Abt Books, and Washington: University Press of America, 1979.

Chapters in Books

"Information for Planning," in *The Practice of Local Government Planning*. Second ed. Washington: International City Management Association, 1988, pp. 472-99.

"Evolution of Third World Shelter Policies" (with Elizabeth Kubale Palmer), in *Spontaneous Shelter: International Perspectives and Prospects*. Philadelphia: Temple University Press, 1988, pp. 3-24.

"Meeting Shelter Needs in Indonesia" (with Leksono Probo Subanu), in *Spontaneous Shelter: International Perspectives and Prospects*. Philadelphia: Temple University Press, 1988, pp. 168-90.

"Policy Analysis with Implementation in Mind," in *Strategic Approaches to Planning Practice*, edited by Barry Checkoway. Lexington, MA: Lexington Books, 1986, pp. 105-21.

"Maintaining Faculty Vitality Through Midcareer Change Options" (with David Palmer), in *Faculty Vitality and Institutional Productivity*, edited by Shirley M. Clark and Darrell R. Lewis. New York: Teachers College Press, 1985, pp. 157-76.

"Policy Analysis," in *The Practice of State and Regional Planning*. Washington: International City Managers' Association, 1985, pp. 213-37.

"Capital Infrastructure Deterioration," in *The Metropolitan Midwest: Policy Problems and Prospects for Change*. Urbana: University of Illinois Press, 1985, pp. 124-50.

"The Metropolitan Midwest in Perspective" (with Barry Checkoway), in *The Metropolitan Midwest: Policy Problems and Prospects for Change*. Urbana: University of Illinois Press, 1985, pp. 1-26.

"Policy Problems and Prospects for Change" (with Barry Checkoway), in *The Metropolitan Midwest: Policy Problems and Prospects for Change*. Urbana: University of Illinois Press, 1985, pp. 302-306.

"Institutional Practices and Faculty Who Leave" in *College Faculty: Versatile Human Resources in a Period of Constraint*, edited by Roger Baldwin and Robert Blackburn. San Francisco: Jossey-Bass, 1983, pp. 43-55.

"Pension Policy, Early Retirement and Manpower Planning," in *Planning Under Regional Stagnation--Schriften zur offentlichen Verwaltung und offentlichen Wirtschaft*, edited by Walter Buhr and Peter Friedrich. Baden-Baden: Nomos, Verlag, 1982, pp. 506-20.

"Rural Transportation: Problems and Possibilities," in *Rural and Small Town Planning*, edited by Judith Getzels and Charles Thurow. Chicago: American Planning Association, 1980, pp. 219-50.

"Rural Housing and Community Services" (with Randl L. Suko), in *Rural and Small Town Planning*, edited by Judith Getzels and Charles Thurow. Chicago: American Planning Association, 1980, pp. 251-94.

"Mid-Career Change and Early Retirement," in *Enhancing Faculty Performance and Vitality*, edited by Wayne Kirschling. San Francisco: Jossey-Bass, 1978, pp. 69-82.

"The Politics of Social Security," in *The Crisis in Social Security*, edited by Michael Boskin. San Francisco: Institute for Contemporary Studies, 1977, pp. 147-71.

Journal Articles

"Recent Trends in Graduate Planning Education," *Journal of Planning Education and Research*, 8, No. 3 (Summer 1989), pp. 215-20.

"Unauthorized Suburban Housing Production in Greece" (with Costas M. Sophoulis), *Urban Geography*, 10, no. 2 (March-April 1989), pp. 138-56.

"Planners Should Design Cities," *Journal of Planning Education and Research* 8, no.1 (Fall 1988), pp. 61-63.

"Jobs and Commercial Office Development: Do New Offices Generate New Jobs?" *Economic Development Quarterly*, Vol. 2, No. 4 (November 1988), pp. 316-25.

"Being Roughly Right Rather Than Precisely Wrong," *Journal of Planning Education and Research* 6, no. 1 (Autumn 1986), pp. 22-29.

"The Private Use of Public Space in Greece," *Ekistics*, Vol. 53, Nos. 318-319 (May/June and July/August 1986), pp. 128-36.

"Infrastructure Decay in the United States," *Built Environment*, 10, no. 4 (1984), pp. 231-44.

"Great Expectations: Illegal Land Development in Modern Greece" (with Costas Sophoulis), *Ekistics*, Vol. 50, No. 301 (July/August 1983), pp. 259-64.

"Voluntary Alternatives to Forced Termination," *Academe*, Vol. 69, No. 1 (January-February 1983), pp. 1a-8a.

"Citizen Input and Professional Responsibility," *Journal of Planning Education and Research*, Vol. 3, No. 1 (Summer 1983), pp. 46-50. Reprinted in *Strategies of Community Organization*, Fred M. Cox, et al., eds. Itaska, IL: F. E. Peacock, 1987, pp. 343-50.

"Higher Education Revenue Sources," *Academe*, Vol. 67, No. 6 (December 1981), pp. 387-88.

"Mid-Career Change Options in Academe: Experience and Possibilities" (with David Palmer), *Higher Education*, Vol. 52, No. 4 (July 1981), pp. 378-98.

"Residents of Three Company Towns Resist Self-Governance," (with Kenneth E. Stabler), *Small Town*, Vol. 11, No. 3 (November-December 1980), pp. 4-9.

"Consulting by Faculty Members," *Academe*, Vol. 66, No. 4 (May 1980), pp. 181-85.

"Paid Consulting by American Academics" (with James Marver), *Educational Record*, Vol. 60, No. 2 (Spring 1979), pp. 175-84.

"The Small Town in the Urban Fringe: Conflicts in Attitudes and Values" (with Kenneth E. Stabler), *Journal of the Community Development Society*, Vol. 10, No. 1 (Spring 1979), pp. 83-93.

"Reaction to Induced Early Retirement," (with Diane Kell), *The Gerontologist*, Vol. 18, No. 2 (April 1978), pp. 173-79. Summarized in *Aging and Work*, Vol. 2, No. 2 (Spring 1979), p. 139.

"Early Retirement in Academia: Making the Decision," *The Gerontologist*, Vol. 17, No. 4 (1977), pp. 347-54.

"The Correlates of Consultation: American Academics in the 'Real World' " (with James Marver), *Higher Education*, Vol. 5 (1976), pp. 319-35.

"Selecting Special Students: Who Decides?" *Teachers College Record*, Vol. 78, No. 1 (September 1976), pp. 101-24.

"A Year-Round Open School Viewed from Within" (With Gretchen Patton), *Phi Delta Kappan*, Vol. 57, No. 8 (April 1976), pp. 522-26.

"A Seven-Day Project: Early Faculty Retirement Alternatives," *Policy Analysis*, Vol. 1, No. 4 (Winter 1975), pp. 731-53.

"Budgeting Under Crisis: The Confederacy as a Poor Country," *Administrative Science Quarterly*, Vol. 20 (September 1975), pp. 355-70.

BEST COPY AVAILABLE

"Simulation in Urban Social Policy Planning" (with James Anderson and William Lienesch), *Simulation*, Vol. 25, No. 1 (July 1975), pp. 17-21.

"Extended Education in an Elite Institution: Are There Sufficient Incentives to Encourage Faculty Participation?" *The Journal of Higher Education*, Vol. 46, No. 4 (July/August 1975), pp. 427-44.

"Age Groups and Travel in a Rural Area," *Rural Sociology*, Vol. 40, No. 1 (Spring 1975), pp. 55-63.

"Busing the Rural Elderly" (with William Lienesch and James Anderson), *Traffic Quarterly*, Vol. 29, No. 1 (January 1975), pp. 81-97. Summarized in *Evaluation*, Vol. 1, No. 3 (1973), pp 19-20.

Book Reviews

Applied Urban Analysis: A Critique and Synthesis by Ian Cullen. London: Methuen, 1985, in the *Journal of Planning Education and Research*, Vol. 5, no. 2 (Winter 1986), p. 136.

"Five Titles on Policy Analysis." *The Journal of Planning Education and Research*, Vol. 2, No. 2 (Winter 1983), pp. 130-33.

Small Cities in Transition: The Dynamics of Growth and Decline, edited by Herrington J. Bryce, Cambridge: Ballinger, 1977, in *Planning*, Vol. 45, No. 1 (January 1979), pp. 25-27.

"The Portrayal of Older Persons in Children's Literature" (with Gretchen Patton) in *The Gerontologist*, Vol. 18, No. 4 (August 1978), pp. 412-13.

Telecommunications in the Urban and Regional Planning Process by John Dakin. Toronto: University of Toronto Press, in *Urban Telecommunications Forum*, Vol. 2, No. 1 (January/February 1973), pp. 8-9.

Other Publications

Guide to Graduate Education in Urban and Regional Planning (with Kathleen Reed). Association of Collegiate Schools of Planning, 5th ed. 1986; 6th ed. 1988.

"Spontaneous Shelter: International Perspectives and Implications for Indonesia," in *Proceedings of the First Seminar on Environment, Culture, and Design*, ed. Achmad Djunaedi, Leksono Probo Subanu, and Gunung Radjiman. Yogyakarta, Indonesia: Department of Architecture, Gadjah Mada University, 1988.

"Introducing High School Students to Planning and Design Concepts," *Planning and Public Policy*, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, August 1987.

"The Private Use of Public Space: Planning and Design Lessons from Greece." *Working Paper*, Milwaukee, Wisconsin: Center for Architecture and Urban Planning Research, November 1984.

"Capital Improvement Planning in the Metropolitan Midwest: Models and Case Studies," *Planning Paper 82-001*, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, February 1982.

"Great Expectations: Illegal Land Development in Modern Greece" (with Costas M. Sophoulis), *Planning Paper 81-006-G*, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, December 1981.

"The Policy Analysis Process," Washington, D.C.: Prepared for The American Council on Education, 1981.

"Testing Citizen Input to Planning Decisions: Some Observations," *Planning and Public Policy*, Vol. 7, No. 3, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, August 1981.

Career Options for Arts Faculties, Issues in the Arts in Postsecondary Education, Vol. 1, No. 2, St. Louis: The American Research Institute for the Arts, June 1981.

"Remembering the Thirties: Public Works Programs in Illinois--A Traveling Exhibit" (with Albert Z. Guttenberg), *Planning and Public Policy*, Vol. 6, No.3, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, August 1980.

The Thirties in Illinois: The Road to Recovery (with Albert Z. Guttenberg), Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, 1980. (An interpretive brochure to accompany the exhibit of the same title.)

"Department of Unintended Consequences," *Policy Analysis*, Vol. 6, No. 3 Summer 1980), p. 290.

"Hiring the Complete Planner" (with Leo Sterk), *Planning and Public Policy*, Vol 5, No. 4, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, November 1979. (A revision of the conference paper of the same name.)

"How to Design a Survey," in *Planning for the Arts: Magic to Stir Men's Blood*, edited by Lachlan F. Blair, Urbana, Illinois: Illinois Arts Council and the Bureau of Urban and Regional Planning Research, University of Illinois, 1978, pp. 29-47. (A revision of the conference paper of the same name.)

"New Dealers Reunite at Fort Peck" (with Barry Checkoway), *Public Works Historical Society Newsletter*, Vol. II (Septemoer 1978), pp. 4-5. Summarized in *Water Spectrum*, Vol. 10, No. 1 (Winter 1977-78), pp. 46-47.

"Schools and Neighborhood Conservation," in *Planning--Where We Live*, edited by John Quinn and Clyde Forrest, Urbana, Illinois: Bureau of Urban and Regional Planning Research, 1977. (A revision of the conference paper of the same name.)

"Attitudes Toward Incentive Early Retirement Schemes" (with David Palmer). In *Current Issues in Higher Education*. Washington, D.C.: American Association for Higher Education, 1978. (A revision of the conference paper "Academia's Attitudes Toward and Experience with Incentive Early Retirement Schemes.")

"Ph.D. Job Crunch Sparks Talk of Early Retirements," The *Champaign-Urbana News Gazette*, February 5, 1978, and the *Champaign-Urbana Courier*, February 5, 1978.

"Residents of Small Towns Speak Out on Growth" (with Kenneth E. Stabler), *Planning and Public Policy*, Vol. 3, No. 3, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, August 1977.

"Public Access to Cable Television," *Planning and Public Policy*, Vol. 2, No. 2, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, May 1976.

"Facilitating Public Access to Cable Television: Alternatives for Governmental Policy" (with Ellen Polgar), *Planning Paper 7507*, University of Illinois, Bureau of Urban and Regional Planning Research, September 1975, and *Working Paper 42*, Graduate School of Public Policy, University of California, Berkeley, December 1975.

"Telecommunications and Older Rural Americans," *Urban Telecommunications Forum*, Vol. 2, No. 9 (September 1973), pp. 5, 7-8.

"A Community Renaissance," *Monogram*, New York: General Electric Company (March/April 1973), pp. 25-27.

"Cable TV," *The Daily Illini*, January 6, 1973.

"CATV Franchise Analysis." Senior author of a five-article series on cable television for the *Champaign-Urbana Courier*, November 1972.

"Cable Communications and the Urban Environment," *Newsletter*, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, Fall 1972.

"Citizens Explore the Future: Social Policy Simulation" (with Tracy Smith), *Newsletter*, Urbana, Illinois: University of Illinois, Bureau of Urban and Regional Planning Research, Fall 1971.

"The Dispersed Metropolis: An Urban Growth Concept for Illinois," *Newsletter*, Urbana, Illinois: University of Illinois, Bureau of Community Planning, Spring 1970.

"The Roles of the Professional Planner in the Model Cities Program," *Exchange Bibliography 73*, Monticello, Illinois: Council of Planning Librarians, April 1969.

Recent Research and Professional Reports

Author:

Trinity College of Vermont, Year 2000 Campus Master Program and Space Plan, Milwaukee: Planning and Design Institute, Inc., October 1989.

Urban Design Principles, Sussex Village Plan, Milwaukee: Planning and Design Institute, June 1989.

Sussex Downtown Implementation Plan, Milwaukee: Planning and Design Institute, June 1989.

Final Report of the Visiting Professor Program. Yogyakarta, Indonesia: Gadjah Mada University, Department of Architecture, August 1987.

Indian Hill in Perspective. Cincinnati, Ohio: Emery Interests, 1987.

Cincinnati in Perspective II. Cincinnati, Ohio: Emery Interests, 1986.

Cincinnati in Perspective I. Cincinnati, Ohio: Emery Interests, 1985.

Merit Residence Hall Design Competition. Milwaukee: School of Architecture and Urban Planning, University of Wisconsin-Milwaukee, March 1985.

"Organizing an AICP Exam Review Course," in American Institute of Certified Planners, *Exam Preparation Manual*, Washington, D.C.: The Institute, 1985.

"Continuing Education Interests of American Planners: An Analysis of Selected American Planning Association Chapter Surveys." Prepared for the AICP Continuing Education Committee, May 1982.

"The Thirties in Illinois: The Road to Recovery." A traveling exhibit that describes the contribution of public works programs of the 1930s to the history and culture of the state of Illinois. (Funded by the Illinois Humanities Council and the National Endowment for the Humanities.) Urbana, Illinois, University of Illinois, 1980-1982.

"An Evaluation of the Gerontological Society's Media and Aging Conferences." Prepared for the Gerontological Society, Washington, D.C. Urbana, Illinois, December 1977.

"A Policy for Sharing Non-Print Instructional Media: University of California at Berkeley and the Peralta Community College District." Prepared for the Office of the Vice Chancellor, University of California, Berkeley, California, September 1974.

Bureau of Urban and Regional Planning Research. *Report to CEFS Economic Opportunity Corporation: An Evaluation Method and an Evaluation of Eight Months of Mini-Bus Service*. Urbana, Illinois, University of Illinois, July 1973.

Richardson, Severns, Scheeler & Associates, Inc. *Legislative Building Impact Study*. Prepared for the Capitol City Planning Commission, Springfield, Illinois, April 1971.

Richardson, Severns, Scheeler & Associates, Inc. *The Open Space Ratio as an Element of Bulk and Massing Control*. Champaign, Illinois, April 1969.

Sidney, Ohio, Business District Design Guides. Urbana, Illinois, October 1967.

A Community Plan, West College Hill, Ohio. Cincinnati, Ohio, June 1967.

Principal Contributor:

Threatened Schools: Possible Responses. Report prepared for the Association of Collegiate Schools of Planning Committee on Threatened Schools, August 15, 1992.

Phase I Long Range Master Planning Project Report. Prepared for the Milwaukee Area Technical College. (With Conta and Associates and Schroeder and Piwoni, Inc.) Milwaukee: January, 1989.

Bureau of Urban and Regional Planning Research. *Environmental Technical Information System Marketing Study*. Urbana, Illinois: University of Illinois, June 1983.

American Society of Planning Officials. *Local Capital Improvements and Development Management: Case Study Methods and Procedures*. (Working Paper #11) (HUD and NSF Contract No. H-2496.) Chicago: ASPO, November 1977.

U.S. Army Corps of Engineers. *Townsite Management Study* (Special Report D-81). Champaign, Illinois: Construction Engineering Research Laboratory, December 1977.

A Survey of Institutional Practices and an Assessment of Possible Options Relating to Voluntary Mid- and Late-Career Change and Early Retirement for University and College Faculty (with Joseph Zelan and Diane Kell) (NSF Contract PRM-7624576). Cambridge, Massachusetts: Abt Associates, November 1977.

Bureau of Urban and Regional Planning Research. *An Evaluation of the Service Access System Element of the Illinois Institute for Social Policy's Tri-County Project* Urbana, Illinois: University of Illinois, September 1973.

Richardson, Severns, Scheeler & Associates, Inc. *Campus Development Plan, University of Maryland, College Park Campus, Phase I, Planning Assumptions and Principles*. Champaign, Illinois: November 1973.

Richardson, Severns, Scheeler & Associates, Inc. *Campus Development Plan, University of Maryland, at Baltimore, Phase I, Planning Assumptions and Principles*. Champaign, Illinois: February 1973.

Richardson, Severns, Scheeler & Associates, Inc. *Red Gate Planned Unit Development, Plan and Program*. Champaign, Illinois: July 1971.

Richardson, Severns, Scheeler & Associates, Inc. *Work Prospectus--New State Office Facilities*. Prepared for the Department of General Services, State of Illinois, Springfield, Illinois: September 1970.

Richardson, Severns, Scheeler & Associates, Inc. *Review and Restatement of Capitol Area Development Policies*. Report to Governor Richard B. Ogilvie, Champaign, Illinois: September 1970.

Richardson, Severns, Scheeler & Associates, Inc. *Functional Relationship Study*. Prepared in collaboration with the Springfield-Sangamon County Planning Commission for the Capitol City Planning Commission. Champaign, Illinois: 1969.

Richardson, Severns, Scheeler & Associates, Inc. *Development Plan and Program Land Trust No. 68-30*. Prepared for the First National Bank, Mattoon, Illinois. Champaign, Illinois: November 1969.

Richardson, Severns, Scheeler & Associates, Inc. *XUDC (Experimental University Development Center) Report on Scheduling*. (Supporting document to the University

of Illinois, Urbana Campus, Long-Range Educational Development Plan and Program.) Champaign, Illinois: October 1969.

Richardson, Severns, Scheeler & Associates, Inc. *Capitol Area Implementation Program 1969-1974*. Prepared in collaboration with the Springfield-Sangamon County Planning Commission. Champaign, Illinois: 1969.

Richardson, Severns, Scheeler & Associates, Inc. *Capitol Area Plan and Design Guide, Paper Number One: Review and Adjustment of Capitol Area Development Policies*. Prepared in collaboration with the Springfield-Sangamon County Planning Commission. Champaign, Illinois: April 1969.

Richardson, Severns, Scheeler & Associates, Inc. *Capitol Area Plan and Design Guide, Paper Number Two: Suggested Overall Design Character for the Capital Area*. Prepared in collaboration with the Springfield-Sangamon County Planning Commission, Champaign, Illinois: April 1969.

Richardson, Severns, Scheeler & Associates, Inc. *Capitol Area Plan and Design Guide, Paper Number Three: Revision of the Capitol Area District Ordinance*. Prepared in collaboration with the Springfield-Sangamon County Planning Commission. Champaign, Illinois: July 1969.

Contributor:

University of Wisconsin-Milwaukee. *UWM and the Future of Metropolitan Milwaukee*, May 1986.

School of Architecture and Urban Planning, Center for Architecture and Urban Planning Research. *Multi-Objective Decision Making Methods for Transportation*. Prepared for the Wisconsin Department of Transportation, September 1985.

American Planning Association. *Local Capital Improvements and Development Management: Analysis and Case Studies*. Washington, D.C.: U.S.G.P.O., 1980.

American Planning Association. *Local Capital Improvements and Development Management: Executive Summary*. Washington, D.C.: U.S.G.P.O., 1980.

In addition, I was a contributor to ten professional reports prepared between 1966 and 1968 for the firm of Ladislas Segoe and Associates, City Planners and Consulting Engineers, Cincinnati, Ohio.

RECENT TEACHING

Regular Guest Lecturer: Introduction to urban planning, infrastructure and capital facilities problems and planning, spontaneous shelter in developing countries; planning and policy analysis, urban real estate development case study; planning methods, statistical analysis.

International Planning and Development Workshop: Comprehensive comparative planning workshop in a developing country. Three student teams were guided in preparation of analyses, plans and implementation programs for housing, historic preservation, and traffic and parking for the Kavala, Greece metropolitan area.

Organizer and Instructor. AICP Exam Review Sessions at the American Planning Association National Conferences, 1984 to 1987.

Participation in off-campus instruction. Topics have included Population Projection and Analysis, Problem Definition and Goal-Setting, Programming and Budgeting, Quantitative Methods, Policy Analysis, and Manpower Policy.

PROFESSIONAL AND COMMUNITY SERVICE

Current

Past President, Association of Collegiate Schools of Planning (1991 to present).

Member, Site Visit Team, Planning Accreditation Board (1984 to present).

Member, Steering Committee, Fairlie-Poplar Task Force (1992 to present).

Member, The Atlanta Downtown Partnership (1992 to present).

Member, The Georgia Research Alliance (1992 to present).

Member, Executive Committee, The University Center in Georgia (1992 to present).

Member, The Regents Global Center (1992 to present).

Member, The Georgia Council on Economic Education (1992 to present).

Member, The Atlanta Rotary (1992 to present).

Member, Board of Directors, Atlanta YMCA (1993 to present).

Recent

Member, Test Specification Committee, American Institute of Certified Planners (1987 to 1992).

Member, Ohio Teacher Education and Certification Advisory Commission (1990 to 1992).

Member, Board of Community Relations, City of Toledo (1990 to 1992). Chair, By-Laws Committee and Personnel Committee; member Economic Development Committee.

Member, ToledoVision (1989 to 1992); member Urban Design Committee.

Member of the Board, Toledo Cultural Arts Center (1989 to 1992). Member, Building Committee.

Member, Lucas County Library Long Range Planning Committee (1990 to 1991).

Member, Tax Levy Advisory Committee, Toledo Public Schools (1990).

Vice President, Wisconsin Architects Foundation (1988 to 1989; member since 1986), Chair of Campaign 300 (1988 to 1989).

Member, Architectural Technology Advisory Committee, Milwaukee Area Technical College (1984 to 1989).

Member, Riverside University High School Advisory Committee on the Architecture, Design, and Urban Planning Curriculum, Milwaukee, Wisconsin (1984 to 1989).

Member, City of Milwaukee Art Commission (1988 to 1989).

Member, Steering Committee, Civic Design Center, Milwaukee, Wisconsin (1983 to 1987).

President, Association of Collegiate Schools of Planning (1989 to 1991).

Vice President, Association of Collegiate Schools of Planning (1985-1987).

Member, Executive Committee, Association of Collegiate Schools of Planning (1980 to 1985).

Chair, Student Recruitment Committee, Association of Collegiate Schools of Planning (1984 to 1987; member 1980 to 1983).

Associate Editor and Reviewer, *Journal of Planning Education and Research* (1983 to 1987). Member, Editorial Board, (1987 to 1989).

Reviewer, *Journal of the American Planning Association* (1982 to 1987).

Reviewer, *Journal of the Community Development Society* (1978 to 1983).

Reviewer, *Journal of Higher Education* (1982 to 1986).

Reviewer, Board of Regents of Higher Education, The Commonwealth of Massachusetts (1987).

Reviewer, U.S. Department of Health and Human Services (1986).

Consultant to Committee Z--Economic Status of the Profession, American Association of University Professors, Washington, D.C. (1983 to 1986; member 1979 to 1983).

Member, Jobs Task Force, American Institute of Certified Planners (1983 to 1985).

Member, Continuing Education Committee, American Institute of Certified Planners (1980 to 1985).

Member, Task Force on Faculty During Hard Times, American Association of University Professors, Washington, D.C. (1981 to 1985).

Chair, Community Development Commission, City of Urbana, Illinois (1978 to 1982).

Member, Board of Directors, Champaign County, Illinois, Development Council Foundation (1978 to 1982; Chair, Governmental Affairs Committee, 1979 to 1981).

Chair, Committee to Evaluate the Office of the Registrar, University of Wisconsin-Milwaukee (1984).

Chair, Search and Screen Committee for the Assistant Chancellor, University Relations, University of Wisconsin-Milwaukee (1988).

Chair, Search and Screen Committee for the Assistant Chancellor, Administrative Affairs, University of Wisconsin-Milwaukee (1984).

Member, President's Advisory Council on the College of Architecture, Planning and Design, Illinois Institute of Technology, Chicago (1988).

Member, External Review Committee, Department of Urban Planning and Policy Development and the Center for Urban Policy Research, Rutgers University (1984).

Planning Accreditation Board Site Visit Teams. Chair: Department of Urban Studies and Planning, University of Maryland, College Park; Chair: Department of Community and Regional Planning, Iowa State University, Ames, Iowa; Chair: Department of Urban Planning, George Washington University, Washington, D.C.; Chair: Department of City and Regional Planning, University of North Carolina; Member: Department of Community Planning and Area Development, University of Rhode Island, Kingston, Rhode Island.

MEMBERSHIP IN NATIONAL ORGANIZATIONS

American Planning Association
American Institute of Certified Planners
Association for Policy Analysis and Management
Policy Studies Organization
American Association of University Professors

HONORS

Founding Member, Phi Beta Delta, Beta Rho Chapter, 1992.

Honorary Member, Phi Kappa Phi, 1990.

Honorary Member, Golden Key National Honor Society, 1989.

Citation for Distinguished Service, Wisconsin Society of Architects/American Institute of Architects, 1989.

Award from the Future Milwaukee Committee in recognition for the International Cities Design Competition, 1989.

Honorable Mention Award for the Milwaukee Great Lake Terrace in the Milwaukee Public Policy Forum's 75th Anniversary Shared Governance Awards Program, 1988.

Urban Design Award for the Milwaukee Great Lake Terrace from *Progressive Architecture*, 1987.

Commendation for Outstanding Service to Professional Certification, American Institute of Certified Planners, 1985.

National Institute of Mental Health Fellowship, University of California, Berkeley (1973 to 1975).

Fellow, Resident Studies Program, Center for Advanced Study, University of Illinois, Urbana (September 1973 to June 1974).

Cited in *Who's Who in America*
Cited in *Who's Who in the Midwest*
Cited in *Who's Who in American Education*
Cited in *Emerging Leaders in America*
Cited in *Men of Achievement*

SELECTED CONFERENCE PARTICIPATION AND PAPERS PRESENTED

"Threatened Schools." Paper presented at the 34th Annual Meeting of the Association of Collegiate Schools of Planning, Columbus, OH, October 31, 1992

"Recruiting Opportunities at U.S. Colleges." Presentation to the Southeastern Federal Recruiting Conference, Cocoa Beach, FL, July 15, 1992.

"The Future of the Industrial City: Results of the International City Design Competition." Paper presented at the 31st Annual Meeting of the Association of Collegiate Schools of Planning, Portland, OR, October 7, 1989.

"Graduate Planning Education in the United States: Content, Structure and Trends," Paper prepared for the International Conference in Celebration of The Royal Town Planning Institute's 75th Anniversary, Birmingham, England, Birmingham Polytechnic, September 13, 1989.

"Urban Design as Public Policy: Integrating Planning, Design, Programming and Fundraising." Paper presented at the 5th International Making Cities Livable Conference, Venice, July 6, 1989.

"If I'm So Healthy Why Do I Feel So Bad?" Comments on "The Unappreciated Acceptance of American Land-Use Planning" by Frank J. Popper, presented at the conference on Future Issues Facing Wisconsin's Land Resources, Madison, Wisconsin, April 29, 1989; printed in the symposium proceedings, "Future Issues Facing Wisconsin's Land Resources," edited by Stephen M. Born, Duncan A. Harkin, Harvey M. Jacobs, and John C. Roberts, Institute for Environmental Studies, University of Wisconsin-Madison, August, 1990.

"Public Service and the Value Concept," (with Robert Greenstreet). Paper presented at the Academic Chairperson's Conference, Orlando, Florida, February, 15, 1989; revised and expanded version presented at the 31st Annual Meeting of the Association of Collegiate Schools of Planning, Portland, OR, October 7, 1989.

"Space Exploration: Feasible Roles for Planners." Paper presented at the 30th Annual Meeting of the Association of Collegiate Schools of Planning, Buffalo, October 29, 1988.

"New Offices and New Jobs: Big Promises, Small Results." Paper presented at the 30th Annual Meeting of the Association of Collegiate Schools of Planning, Buffalo, October 28, 1988.

"Early Retirement: Is There an Optimal Solution." Presentation to the Modern Language Association Annual Meeting, San Francisco, December 30, 1987.

"The International City Design Competition." Presentations at: the 1987 Tri-Annual Congress of the International Union of Architects, Brighton, England July 16, 1987; the 29th Annual Meeting of the Association of Collegiate Schools of Planning, Los Angeles, November 7, 1987; the 1988 annual meeting of the American Planning Association, San Antonio, April 30 to May 3, 1988; the 30th Annual Meeting of the Association of Collegiate Schools of Planning, Buffalo, October 29, 1988.

"The Kampung Improvement Program: Prospects and Possibilities." Lecture to the Center for Southeast Asian Studies, University of Wisconsin, Madison, October 2, 1987.

Presenter and Discussant, "The First Seminar on Environment, Culture, and Design," Department of Architecture, Gadjah Mada University, Yogyakarta, Indonesia, August 3-4, 1987.

"Introducing High School Students to Planning and Design Concepts: The University of Wisconsin-Milwaukee--Milwaukee Public Schools Experience." Paper presented at the 28th Annual Meeting of the Association of Collegiate Schools of Planning, Milwaukee, October 12, 1986.

"Urban Design as Public Policy for Economic Development: Feasible Roles for the Urban University." Paper presented at the Economic Development Conference, School of Planning, University of Cincinnati, April 17, 1986; revised version presented at the International Urban Universities Conference, Winnipeg, Manitoba, Canada, September 19, 1986, and published in "New Directions for Urban Universities: International Perspectives," by the Institute of Urban Studies, University of Winnipeg, 1987.

"Being Roughly Right Rather than Precisely Wrong: Teaching Quick Analysis Versus Researched Analysis." Paper presented at the 27th Annual Meeting of the Association of Collegiate Schools of Planning, Atlanta, November 2, 1985.

"Policy Research and Curriculum Development." Paper presented at the 26th Annual Meeting of the Association of Collegiate Schools of Planning, New York, October 20, 1984.

"Educating the Next Generation of Architects." Paper presented at the 53rd Annual Convention of the Wisconsin Society of Architects, Lake Geneva, Wisconsin, May 1984.

Organizer and Chair, "Academic Roots of Planning Practice." Conference session at the National Conference of the American Planning Association, Minneapolis, Minnesota, May 1984.

Chair and Discussant, "Planning History." Conference session at the 25th Annual Meeting of the Association of Collegiate Schools of Planning, San Francisco, October 1983.

"High Technology and Cut-Back Planning." Paper presented at the American Planning Association's Upper Midwest Planning Conference, Chicago, September 1983.

Anchor and Presenter, "Mid-Career Change, Early Retirement and Age 70 Mandatory Retirement." Teleconference sponsored by the American Council on Education, Washington, D.C., February 7, 1983.

Moderator, "Infrastructure Planning." Conference session at the 24th Annual Meeting of the Association of Collegiate Schools of Planning, Chicago, October 23, 1982.

"Developing an Institutional Profile for Analyzing Faculty Career Options." Paper presented at the annual meeting of the American Council on Education, Minneapolis, October 15, 1982.

Co-organizer and presenter, "Policy Analysis in State and Local Planning." Workshop sponsored by the American Institute of Certified Planners at the National Conference of the American Planning Association, Dallas, May 9, 1982.

"Voluntary Alternatives to Forced Termination." Paper presented at the Faculty and Higher Education in Hard Times Conference sponsored by the American Association of University Professors, Washington, D.C., May 21, 1982.

"Staying in Your Home After you Retire: Pros and Cons." Presentation at the University of Illinois Pre-retirement Planning Conference, Urbana, March 27, 1982.

"Early Retirement and Career Change Options in Postsecondary Education." Presentation to the Advisory Committee to the Illinois Board of Higher Education, Chicago, DePaul University, March 26, 1982.

Reactor, "Mandatory Retirement Policy in Higher Education." Conference sponsored by the Lilly Endowment, Inc., Washington, D.C., March 12, 1982.

"An Overview of Early Retirement and Career Change Options for Academe." Paper presented at the annual meeting of the American Conference of Academic Deans, Boston, January 11, 1982.

"Continuing Education: Why Are We So Cheap?" Paper presented at the 23rd Annual Meeting of the Association of Collegiate Schools of Planning, Washington, D.C., October 23, 1981.

Reactor, "Reassessment and Reshaping of Faculty Careers: Service Needs." Conference sponsored by the Academy for Educational Development and the Carnegie Corporation, Henry Chauncey Conference Center, Princeton, New Jersey, September 10-11, 1981.

"Fiscal and Economic Information: New Data for the '80s." Paper presented at the joint conference of the Illinois and Wisconsin Chapters of the American Planning Association, Chicago, September 26, 1981.

"Academic Training for the Professional Planner." Paper presented at the joint conference of the Illinois and Wisconsin Chapters of the American Planning Association, Chicago, September 24, 1981.

Rappateur, "Research Agenda for the 1980s." Illinois White House Conference on Aging, Urbana, May 27, 1981.

"Career Change Policies and Strategies." Paper presented at "Faculty Careers: Rethinking Paths and Options." A conference sponsored by the American Council on Education and the New England Board of Higher Education, Boston, February 18-19, 1981.

"Continuing Education Interests of Illinois APA Members." Paper presented at the 22nd Annual Meeting of the Association of Collegiate Schools of Planning, Cincinnati, October 26, 1980.

Reactor, "Faculty Careers: New Options." A conference sponsored by Teachers Insurance and Annuity Association of America and the Exxon Education Foundation at the Belmont Conference Center, Washington, D.C., September 8-10, 1980.

"Continuing Education Needs of Planning Professionals." Paper presented at the Annual Conference of the Indiana Chapter of the American Planning Association, Brown County, Indiana, June 1980.

"Local Capital Infrastructure Needs." Paper presented at the 1980 Institute on Planning, University of Illinois, Bureau of Urban and Regional Planning Research, Champaign, Illinois, June 1980.

"Capital Infrastructure Programming in the Metropolitan Midwest." Paper presented at the joint conference of the Illinois and Wisconsin Chapters of the American Planning Association, Milwaukee, Wisconsin, June 1980.

"Controlling Faculty Size: Outmigration and Mid-Career Change" (with David Palmer). Paper presented at the TIMS/ORSA Joint National Meeting, Washington, D.C., May 1980.

"Continuing Education Needs of Illinois Planners." Paper presented at the National Conference of the American Planning Association, San Francisco, April 1980.

Organizer and Moderator, "Policy Analysis in Planning Practice." A session at the National Conference of the American Planning Association, San Francisco, April 1980.

"Changes in Faculty Retirement/Replacement." Paper presented at the 1980 National Assembly of the National Center for Higher Education Management Systems, Denver, January 1980.

"Faculty Mid-Career and Early Retirement Concerns." Papers presented at the American Council on Education Leadership Seminars, Cincinnati, November 1979 and St. Petersburg, February 1980.

"Hiring the Compleat Planner" (with Leo Sterk). Paper presented at the 21st Annual Meeting of the Association of Collegiate Schools of Planning, Baltimore, October 1979.

"Early Retirement and Mid-Career Redirection Options." Paper presented at the Annual Conference of the American Association of University Professors, Houston, June 1979.

"Institutional Responses to the Higher Mandatory Retirement Age." Paper presented at the Forty-third Annual Meeting of the Midwest Economics Association, Chicago, April 1979.

Organizer and Moderator, "Problem Solving: Tips and Techniques for Planners." A session at the National Conference of the American Planning Association, Miami, March 1979.

"Synthesis of the Conference," Midwest Migration Conference, University of Illinois, Champaign, March, 1979.

"Pension Policy, Early Retirement and Manpower Planning." Paper presented at the Fourth International Regional Science Institute, University of Siegen, Siegen, Germany, August 1978.

Organizer and Moderator, "Small Town Planning Methods." A session at the National Conference of the American Society of Planning Officials, Indianapolis, April 1978.

"A Demonstration to Initiate Interaction among Service Providers and the Media." Paper presented at the Twenty-fourth Annual Meeting of the Western Gerontological Society, Tucson, Arizona, April 1978.

"Academia's Attitudes Toward and Experience with Incentive Early Retirement Schemes" (with David Palmer). Paper presented at the National Conference on Higher Education, American Association for Higher Education, Chicago, Illinois, March 1978.

"Some Impacts of Raising the Mandatory Retirement Age" (with Robert K. Foertsch). Paper presented at the American Council on Education Conference on Retirement Policy and Higher Education, Washington, D.C., February 10, 1978.

"How to Design a Survey." Paper presented at the 1978 Winter Conference on Planning for the Arts, University of Illinois, Bureau of Urban and Regional Planning Research, Urbana, January 1978.

"Schools and Neighborhood Conservation." Paper presented at the 1977 Institute on Zoning and Planning, University of Illinois, Bureau of Urban and Regional Planning Research, Urbana, June 1977.

"Early Retirement Among Academics: What are the 'Right' Conditions?" Paper presented at the Twenty-ninth Annual Scientific Meeting of the Gerontological Society, New York, October 15, 1976.

Participant, "Invitational Conference on Retirement Preparation." Convened at the Twenty-ninth Annual Scientific Meeting of the Gerontological Society, New York, October 14, 1976.

"When to Retire: Recent Experiences and Present Plans." Paper presented at a conference on Academic Planning for the 1980s and 1990s, University of Southern California, Los Angeles, January 1976.

BEST COPY AVAILABLE

"The Latent Demand for Early Faculty Retirement." Paper presented at a conference on Academic Planning for the 1980s and 1990s, University of Southern California, Los Angeles, January 1976.

"Potential Uses of New Communications Technologies in Urban Policy Planning." Paper presented at the Illinois Sociological Society Conference, Bloomington, Illinois, October 1975.

"Toward Improved Social Service Delivery: An Experiment in Centralized Information and Referral" (with William Lienesch). Paper presented at the 1974 National Conference, American Institute of Planners, Denver, Colorado, October 1974.

"The Immobile Americans" (with William Lienesch and James Anderson). Paper presented at the 1973 National Conference, American Institute of Planners, Atlanta, Georgia, October 1973.

"An Experiment in the Use of Computer-Based Communications to Explore Social Policy Questions" (with James Anderson and William Lienesch). Paper presented at the 1973 National Conference, American Institute of Planners, Atlanta, Georgia, October 1973.

"Gaming Simulation in Planning Education." Paper presented at a Gaming Workshop sponsored by the College of Design, Architecture and Art, University of Cincinnati, January 1973.

Organizer and Moderator, "Cable Television and Governmental Policy." A panel on the problems of franchising and government regulation of cable television, National Conference of the American Society for Public Administration, Los Angeles, April 1973.

"Cable Communications, Urbanization Policy and Personal Choice." Paper presented at the 1972 National Conference, American Institute of Planners, Boston, Massachusetts, October 1972.

"Man-Computer Exploration of Social Policy." Paper presented at the 1972 Mid-Continent Meeting of the Regional Science Association, Bloomington, Indiana, March 1972.

ARCHITECTURE PROGRAM REVIEW
UNIVERSITY COORDINATORS

ARCHITECTURE PROGRAM REVIEW COORDINATORS

UNIVERSITY OF FLORIDA

Dr. Wayne Drummond, Dean
College of Architecture
University of Florida
Gainesville, Florida 32611

FLORIDA STATE UNIVERSITY

Dr. Bruce Stiftel, Chair
355 Bellamy Building
Urban & Regional Planning
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Tallahassee, Florida 32306

Dr. David Butler
105 Fine Arts Complex
Interior Design
Florida State University
Tallahassee, Florida 32306

FLORIDA A&M UNIVERSITY

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College of Engineering Sciences
Florida A&M University
Tallahassee, Florida 32307

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Dr. Alexander Ratensky, Director
Architecture Program
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University of South Florida
Tampa, Florida 33620

FLORIDA ATLANTIC UNIVERSITY

Dr. David Prosperi, Chair
Urban & Regional Planning
Florida Atlantic University
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FL. INTERNATIONAL UNIV.

Dr. Jose Mitrani, Chair
Construction Management
VH 230
Florida International University
Miami, Florida 33199

Dr. Leonardo Alvarez, Director
School of Design
VH 212
Florida International University
Miami, Florida 33199

STATE UNIVERSITY SYSTEM

Dr. R. E. LeMon, Director
Program Review & Accountability
Board of Regents Office
325 West Gaines Street
Tallahassee, Florida 32399-1950

FLORIDA EMPLOYER OPINION SURVEY

ANNUAL REPORT

FLORIDA EDUCATION AND TRAINING
PLACEMENT INFORMATION PROGRAM

TALLAHASSEE, FLORIDA

JUNE 1993

The following is an excerpt from the FETPIP Annual Report. The population surveyed was training-related Florida Employers of 1990-91 graduates of SUS programs in Architecture.

SECTION XI. ARCHITECTURE

"In architecture an employee needs a better understanding of problem solving. The individual does not necessarily need to know the answer but how to go about getting it on their own!!!"

... A Florida Employer

A. BACKGROUND/RESPONSES

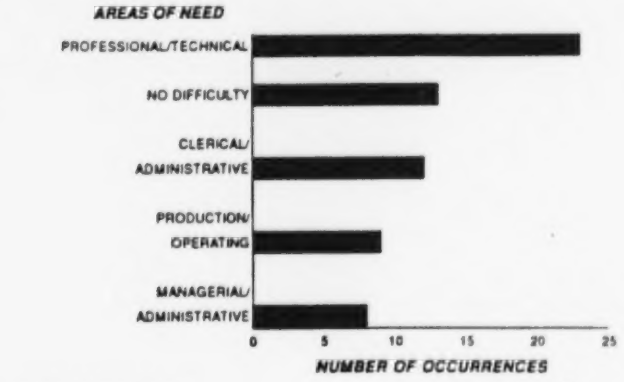
Two survey types were utilized within each University discipline area. Half of the employers received a general survey (33), similar to one used in prior years activities with District / Community College program areas, and the other half (33) received a specific survey, designed from requirements for architecture examination outlined in Florida Statutes 481 Pt. 1, Chapter 21B-14, Florida Board of Architecture and Interior Design .

There were 66 Architecture employers identified as having hired a training related graduate. Of those, 76% or 50 firms (23:General, 27:Specific) responded to the survey request.

B. HIRING NEEDS

This first inquiry requested that employers identify those job categories in which they were experiencing difficulties in finding qualified applicants. There were ten categories along with one for "no difficulty" listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as were appropriate. Figure 39 shows those occupational areas where architecture employers identified their highest need.

FIGURE 39
EMPLOYER HIRING NEEDS
ARCHITECTURE



MOST FREQUENT RESPONSES

FIGURE 39 COMMENTS: Employers indicated that they were having the most difficulty finding qualified applicants within the professional/technical occupational area. The occupations most mentioned within this area were project architects and project managers. The next highest response category chosen was "No Difficulty". In the comment section for this inquiry the most frequently mentioned needs were for the architects to have: computerized assisted drawing (CADD) skills, sound marketing and technical skills, and business and accounting skills.

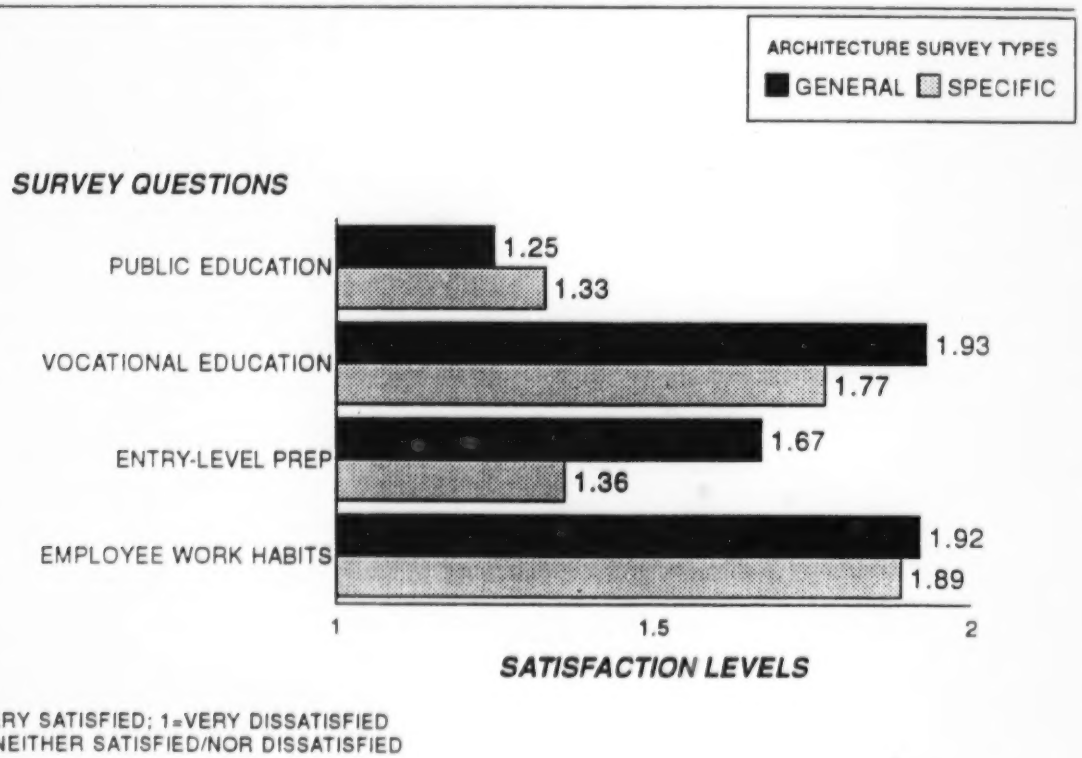
C. GENERAL EDUCATION/PREPARATION QUESTIONS

"An architects development still requires an "apprentice" period!!"

... A Florida Employer

Every survey asked employers to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits. Figure 40 is a graphic presentation of those four areas and their calculated levels of satisfaction for both the general and specific architecture opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

FIGURE 40
GENERAL PUBLIC EDUCATION
AND PREPARATION QUESTIONS



2= VERY SATISFIED; 1=VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 40 COMMENTS: Responses to both the general and the specific survey indicated that employers were satisfied with vocational education, and with employee work habits. Each survey type also reflected that employers were dissatisfied with public education. These results are consistent with other findings within this report. Note that there is a contradiction between general and specific survey responses concerning employee entry-level preparation. Specific survey employers were dissatisfied (1.36) with this area while general survey (1.67) responses reflected satisfaction with the entry-level preparation of their employees.

D. OVERALL OCCUPATIONAL PREPARATION

"Reading-Writing-Spelling-Grammar; Its hard to believe but we find Florida college graduates are weak in professional writing and technical writing and speaking. Also, I suspect you are producing too many graduates and suggest following-up on current grads before expanding capacity!!!"

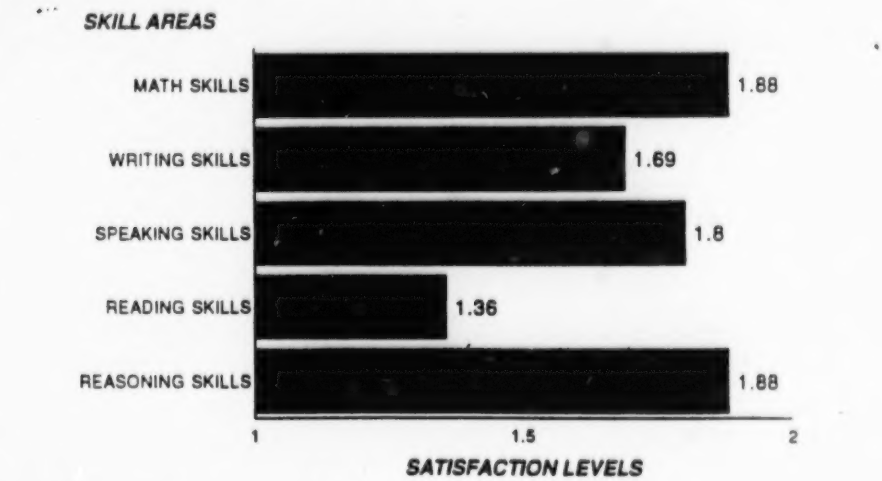
... A Florida Employer

Part C, Overall Occupational Preparation, consisted of 13 questions on the general and 17 questions on the specific architecture opinion survey. These questions were grouped into two areas: basic skills and job-related or technical skills. The general survey was structured similarly to prior year surveys and contained the same elements for each university discipline. The specific architecture survey items were extracted from the architecture examination required for licensure in Florida. These two areas with their specific internal components for both the general and specific architecture surveys are displayed graphically in Figures 41, 42, 43, 44, and 45.

1. Basic Skills - The overall satisfaction level for basic skills preparation was 1.65, or satisfied. Figure 41 looks at five basic skills from the general survey and their respective employer responses. Figure 42 looks at five basic skills from the specific architecture survey and the employer responses.

a. General Survey

FIGURE 41
BASIC SKILLS
GENERAL SURVEY - ARCHITECTURE



2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

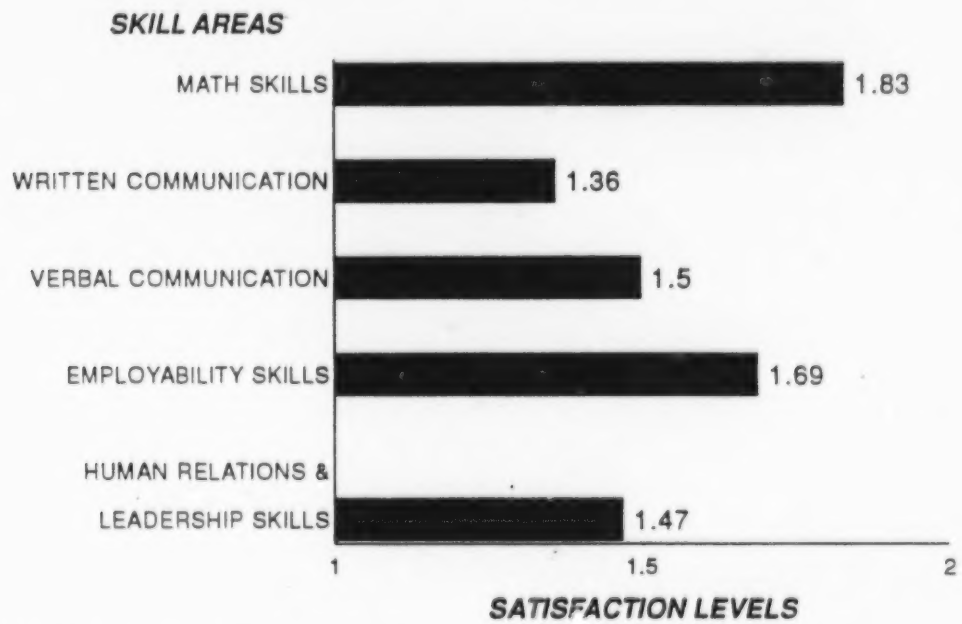
FIGURES 41 COMMENTS: Employers from the general survey were satisfied with four of the five basic skills listed. Employers were quite satisfied with their employees' math, speaking, and reasoning skills and less satisfied with writing skills. General survey employers were dissatisfied with their employees' reading skills.

b. Specific Survey

"Employees need time management skills, marketing techniques and the ability to "listen" to subcontractors ideas."

... A Florida Employer

FIGURE 42
BASIC SKILLS
SPECIFIC SURVEY - ARCHITECTURE



2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

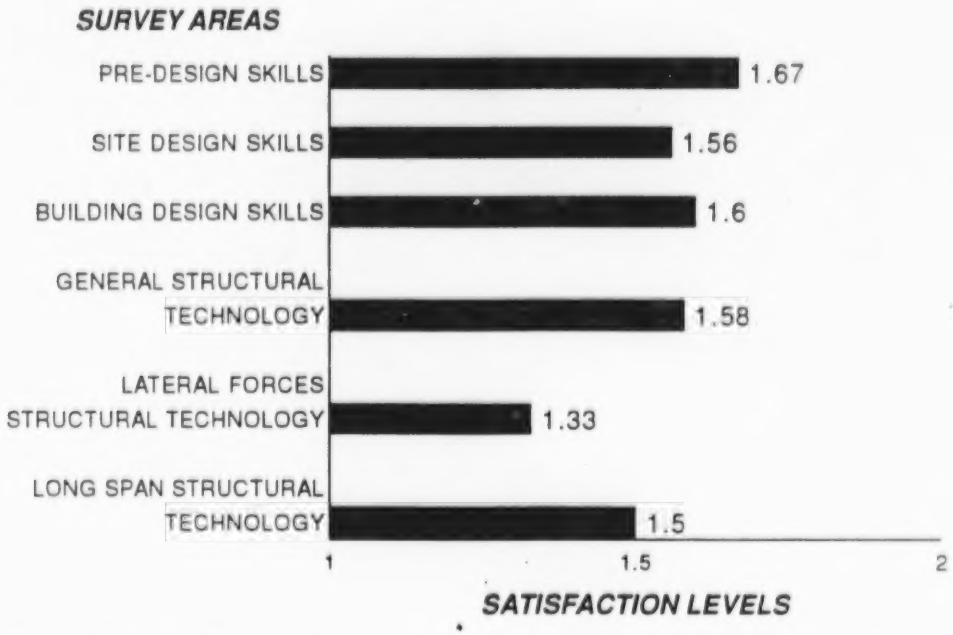
FIGURE 42 COMMENTS: Specific survey employers were satisfied with two of the five basic skills listed. Employers were more satisfied with employee math skills than with their employability skills. Employers were dissatisfied with their employees' written communication skills and their human relations and leadership skills.

b. Specific Survey- The overall score for specific survey job-related skills was 1.51 or slightly satisfied.

"We need project managers and project architects with exceptional computer aided drafting skills."

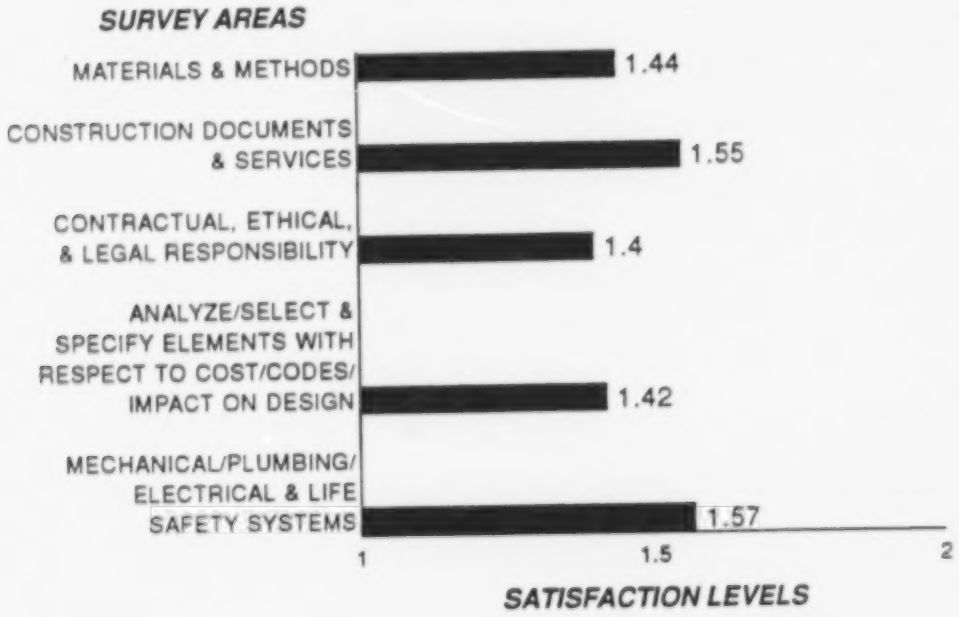
... A Florida Employer

FIGURE 44
JOB-RELATED OR TECHNICAL SKILLS
SPECIFIC SURVEY - ARCHITECTURE



2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 45
JOB-RELATED OR TECHNICAL SKILLS
SPECIFIC SURVEY - ARCHITECTURE



2= VERY SATISFIED; 1= VERY DISSATISFIED
1.5= NEITHER SATISFIED/NOR DISSATISFIED

FIGURE 44 & 45 COMMENTS: Specific survey employers were satisfied with six of the eleven specific job-related or technical skills. They were particularly dissatisfied with their employees' knowledge of lateral forces structural technology (1.33) and their ability to identify, analyze, evaluate, and specify appropriate building materials, building systems, and hardware and their methods of installation (1.44). They were also dissatisfied with their understanding of contractual, ethical, and legal relationships and responsibilities (1.40) and of construction management procedures relative to control quality, time, and cost and with their ability to analyze, select, and specify various components with respect to cost, building codes, and their impact on architectural design (1.42).

OVERALL JOB-RELATED SKILL COMMENTS: Note the considerably lower employer satisfaction ratings between the general and specific survey employers. The specific survey employers were less satisfied with many specific architectural duties. This architecture program area is the only area to reflect differences between the general and specific surveys. In their responses, employers of the architectural graduates maybe saying that as general employees, they are adequate (general survey responses); but as architects, there are some areas in which they could be strengthened (specific survey responses).